

Standard Train Rule Examination

COLLINGWOOD



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Standard Train Rule Examination

9th Edition

(Formerly called "Questions and Answers")

This book is based on the Standard Code of Train Rules of the American Railway Association, in effect January 1st, 1914

For the use of Trainmasters, and other examining officers,
in the examination of Trainmen, Enginemen, Towermen
and Telegraph Operators.

A thorough and practical explanation of the Standard
Code of Train Rules, so arranged as to be of greatest
value in examinations and in the operation of trains.

A book of clear and definite train rule knowledge,
comprising authoritative rulings, and a complete
Train Rule Examination.

By G. E. Collingwood

Price Postpaid \$2.00

Standard Code of Train Rules for Single Track
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By

GEORGE ELMER COLLINGWOOD

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INTRODUCTION.

STANDARD TRAIN RULE EXAMINATION is the pioneer book in explanation of the Standard Code and has attained an international reputation. It has blazed the way for a more uniform understanding and a systematic study of train rules and train orders. In presenting this Ninth Edition the author believes that he has not overlooked any point which will be of benefit.

Rulings of the American Railway Association have been followed in every case and upon points where no ruling has been made by the American Railway Association we have followed the theory upon which the rules are based.

This book is for the use of Examining Officials and also for the use of Trainmen, Train Dispatchers, Telegraph Operators and others who wish to be thoroughly posted on the rules.

The book will encourage a thorough and systematic study of train rules and train orders. It will assist in a better understanding of all rules by stating correct practice and the reasons therefor. It brings out the vital points in each rule and imparts a full knowledge of the object to be obtained in practice.

Any road has the right to frame such rules as it may see fit for the proper operation of its trains, interpreting such rules in accordance with the wording thereof, and it is not the intention of the author that any reader should depart from the rules and rulings governing the road

upon which he is employed. However, very few roads depart from standard practice, and then only in a very few minor details, so that this book as a whole cannot but strengthen the hands of those charged with the enforcement of the rules by assisting to a complete understanding thereof.

General Officers, Superintendents, Trainmasters, Train Dispatchers, Telegraph Operators, Conductors, Engineers, Firemen and Brakemen will find this book specially suited to their needs in conducting and passing examinations, and broadening their knowledge of train rule subjects.

G. E. COLLINGWOOD.

EXPLANATION OF MAKE-UP.

In arranging this book the examination questions with their answers for each rule are given first. Following these will appear any further explanation which may be necessary in order to make the meaning of the rule plain. If the American Railway Association has made any ruling on the rule, such ruling will appear after the explanation. If a rule is misleading the fact will be stated under the heading of "Criticism," so that error of interpretation may be avoided, and also to assist those who may wish to revise their rules.

All questions in this book are based upon the Standard Code of train rules as adopted, 1906, that being the last revision made.

To find the meaning of any rule, turn to the index, which will give its location.

THE STANDARD CODE

The Standard Code of train rules is a set of rules formulated by the Train Rules Committee of the American Railway Association in 1887. Divided into rules for single and double track, in 1889, revised slightly from time to time, and are now in use on nearly every railroad in the United States and Canada.

CLEARANCE CARD.

The Standard Code should state that, "A train will not leave its initial station on any division (or subdivision) without a Clearance Card. The authority to issue such Clearance Card will be obtained from the Train Dispatcher."

The above rule is not in the Standard Code, probably for the reason that all roads do not use the Clearance Card. The committee's idea is that such subjects as the Clearance Card and the Train Register should be left for each road to arrange to suit itself, because roads are not uniform upon these points. To my mind the reason assumed for not treating these subjects is the best reason why the Standard Code should treat of them. The inserting of such a rule would not make it binding upon any road to use it, but it would go a long way towards bringing about uniform practice.

STANDARD TIME.

Few of the younger railroad men can appreciate the great advantage we enjoy today because of a uniform time as compared with what existed prior to 1883, before standard time was adopted

by the railroads. There were upwards of fifty different standards of time in use in the United States, and as they were not systematic, the confusion and complications which resulted from the use of so many kinds of time made a very serious proposition, not only for the railroads, but for the traveler as well. Some roads were so located that it required six or seven different kinds of time to get over the road, and so complex was the situation that very few officials could state the time which was used on any road but their own and its immediate connections.

The change was effected on a Sunday in November, 1883. As had been previously arranged, when twelve noon by local time had arrived in new York City the bells of St. Paul's Chapel tolled the hour for the last time. Just four minutes afterward the Western Union time ball fell, and Trinity's chimes rang out the new hour, in accordance with an electric signal from the Naval Observatory at Washington.

Under this system of standard time there are just four different times used in the United States, all of them an even hour apart, with an elastic boundary line between the hour sections, the exact point for change of time being designated. These four times are based upon the 75th, 90th, 105th and 120th meridians, and are called Eastern, Central, Mountain and Pacific time, respectively.

THE REGISTER.

It is of great importance that some fixed arrangement be established for the purpose of notifying trains at terminals or junctions, or at any point where they may originate, of all trains which have arrived or left, and there is no better way of doing this than by train register.

A register book should be established at each terminal, and at junction points where trains

enter the main line. Should a train arrive as one section and leave as another, or arrive as one number and leave as another, two lines should be used in registering.

Train registers should be made standard and the rules governing their use should be included in our train rules. Each page should be large enough to hold all the trains run during 24 hours, or at least all the trains in one direction, the opposite page being used for trains in the other direction; each page should bear a date at the top, and besides should show a column for date for each train registering; a train should register into its terminal on the page corresponding in date with the day it is due to arrive, and in case it is late and does not arrive until a later date, it should show the date of actual arrival in the column provided for that purpose.

The matter of work trains registering at register stations has received more or less thought, and the general idea is that a work train should register its arrival and departure at register stations.

SIGNATURE OF ORDERS.

The best results are obtained in train dispatching when each dispatcher signs his own initials. Some roads use the superintendent's initials, some use the trainmaster's and some the chief dispatcher's initials.

Train dispatchers, to get the best results, are required to exercise a general supervision over train movement, and when they use their own initials they are in a better position to deal with the situation than under other circumstances. He feels his responsibility more clearly. There is no more reason for using a name by proxy for the dispatching of trains than there would be in re-

quiring the superintendent to use the general manager's name in transacting his business.

DAY OFFICES.

The train order signal at stations which close for the night is usually blanked until the operator resumes work the following morning. But in view of the great importance of trainmen knowing positively that an office is or is not closed for the night, it seems that some more definite information should be given than simply the absence of a signal, especially as the absence of this signal means one thing when the operator is on duty—DANGER, and another when the office is closed for the night—PROCEED.

When the signal is simply blanked the train crew have no way of knowing that the office is closed except that they take it for granted when they see no signal. This introduces an element of grave danger, for should the operator still be on duty and hold orders or block and his light fail, under these conditions there would be no check against accident. The precaution provided for by Rule 27, which arranges for an imperfectly displayed signal, or the absence of a signal, to act as a stop, or danger signal, would be of no avail on roads where the blanking of the train order signal is authorized, without some other special signal being displayed. When an office is closed for the night the train order signal should be blanked and a green light placed in front of the office on a bracket or below the regular train order signal, and also a green flag below the light so that the signal would be plainly visible during the night and early morning hours, and give positive information to trainmen. Under this arrangement an engineman would have positive information—the green light telling him the office is closed, or if no green light is shown he would un-

derstand the office is open and be governed by the signal indication and Rule 27.

With this arrangement the rules should not show the office hours, and trainmen should consider all offices open at night unless the green signal is displayed. This would leave the dispatcher free to hold day men when necessary, with full assurance that there would be no mis-carriage of orders or block on account of an office being kept open past the usual hours.

THEORY OF THE STANDARD CODE.

The Standard Code is constructed with the idea that trainmen must at all times protect their trains. The theory being that it is more conducive to safety in the operation of a railroad to require the men in charge of trains to look out for and protect themselves at all times against other trains and engines, without notice of their whereabouts, than to undertake to give them notice of their movements and whereabouts, for the reason that if men come to expect notice of approaching trains, they invariably relax their vigilance and rely upon this notice rather than upon their own watchfulness for their safety, and that in the long run more accidents will happen at times when it is impossible or impracticable to convey notice to them, than would occur if they were spurred to constant watchfulness by the knowledge that a train was liable to come upon them at any time without notice.

The working example of this principle is illustrated in Rule 99, which provides that trainmen must arrange immediate protection whenever a train stops or is delayed.

The protection afforded following trains under the rules is not always fully understood. Take, for example, a third class train running on orders

ahead of a second class train; some trainmen and others have an erroneous idea that under the rules this order in some manner gives to each train a sort of protection, but such is not the case. When an order is issued for one train to run ahead of another, both trains must exercise the same care as before, no more, no less; that is, both must keep a sharp lookout ahead, and if stopped must flag immediately. The idea in making the different classes is not to protect trains, but it is thought that by such method it will require less train orders to move important trains without delays by less important trains, than would be required if trains were all of one class. So, instead of being a measure for protection, it is a means of facilitating movement. The train order should not be expected to relieve the leading train from proper flagging, nor should it in any manner place more burden for watchfulness on the following train; if it does either of these things it has miscarried.

A third class train must at all times look out for trains ahead, or for a flag, regardless of the fact that it holds no orders of a fourth class or other train ahead of it. Because there might be a third, or even a second or first class train ahead, so that the receipt of this order is not a protective notice, but simply a notice given in double form changing the established time-table privileges of an inferior train for some reason, it may be the more important (first class) train is late, or it may be it is of not as great importance as usual; at any rate it is given to facilitate movement only, Rules 91 and 99 being all the protection that is required between trains moving in the same direction. We believe that Rule 91 should contain the statement of principle that enginemen must keep a sharp lookout ahead for trains or flag at all times. As it stands now, this is left to inference, and it is just as important as the instructions to flag.

RESUMING SCHEDULE.

A regular train assumes its schedule at its initial station and it is entitled to use such schedule to the terminal station of the schedule on that division.

When a train is detoured for any cause it may resume its schedule when it again reaches its own line, it being understood that when leaving its initial station it had authority to use the schedule to its terminal station, and that authority not having been taken away, remains in effect. The same is true of a train which has completed a part of its run and is temporarily withdrawn for special service. In such a case, when it has performed its special service, it can resume its schedule, unless its rights thereto have been specifically taken away by train order. In any case of this kind the conductor should report to the train dispatcher before continuing on the trip, the same as he would at the initial station. When cleared by the dispatchers no orders would be necessary to resume the schedule. This matter of reporting to the train dispatcher is for the purpose of checking against outstanding orders and also to advise the dispatcher that the train is ready to proceed—see ruling of the A. R. A. on “Resuming Schedule.”

EXTRA TRAINS.

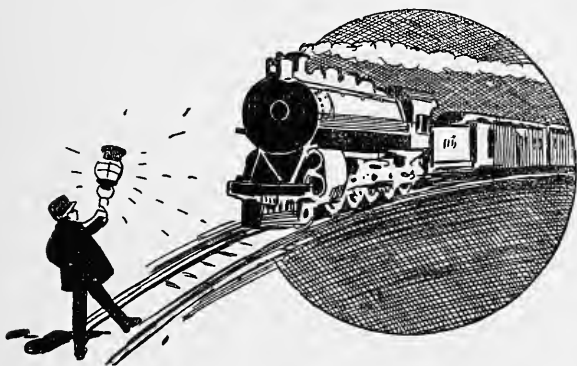
There is no superiority between extra trains unless it is made by train order, with the exception that at meeting points between extra trains the train in the inferior time-table direction must take the siding. A study of the rules will show that one extra cannot be made superior to another under a Form C order by authority of such form, although as a matter of fact orders are issued on nearly all roads giving one extra right over another extra, but without the authority or the re-

restraining guidance of specific rules properly explained. The Train Rules Committee who framed the Standard Code refused to insert an example under Form C which could be used between extra trains, claiming that as extra trains had no schedule such practice would virtually fix a meeting point in any case. In issuing a right of track order between extra trains there is danger unless the right of track is given to the end of the run of the first named train, or to the end of single track, or to a point already reached and at which the order is received by the second named train. In starting an extra train from a point at which it is to meet an opposing extra train the order should read, "After extra 234 arrives at A engine 546 will run extra A to B."

Form G is for running extra trains, and there are three examples given. The first example directs an engine to run extra from one designated point to another, and under this example an extra need not protect against opposing extra trains unless it is directed by train order to do so. The second example is for running an engine extra from one point to another and return to a certain point; under such an order the extra must go to the second point named in the order before it is permitted to return. The third example is generally used for passenger trains and is so arranged as to make a schedule for the extra train. Oftimes such an order gives the extra right over all trains, and in some cases such extras have been known to run through yard limits at the same rate of speed as a first class train instead of an extra. It must be remembered that an extra, moving under such an order, is still an extra, and, while it has right over all trains, it must be governed by the rules directing the movements of an extra while it is passing through yard limits.

In the case where an extra train ties up on the

road for a certain length of time and then reports for orders, the Standard Rules do not provide any form for giving this extra train information as to what trains, which are overdue, have arrived or left that station. If the extra happens to be tied up at a register station this information can be obtained from the train register, but if it is not it becomes of great importance that it receive dependable information as to what schedules have been fulfilled. To cover such cases as this an order should be issued to the extra reading as follows: "All trains due at H at 6 a. m. have arrived or left except No. 3 and No. 4." Such an order is necessary to conform with Rule 83.



TRAIN RULE EXAMINATION

GENERAL RULES

1. Q. Who must provide themselves with a copy of the book of rules?

A. Employes whose duties are prescribed by them.

2. Q. Do you fully understand the provisions that relate to your particular duties?

A. Yes.

3. Q. What is expected of you when the meaning of any rule or special instruction is not clear to you?

A. Consult superior officer.

4. Q. Is it necessary to pass the required examinations?

A. Yes.

5. Q. What are persons employed on a train subject to?

A. The rules and special instructions.

6. Q. What is your duty in carrying out the rules and special instructions?

A. Employes must render every assistance possible in carrying out the rules and special instructions.

7. Q. What is expected of you when you know of an infringement of any rule or special instruction?

A. Report same to superior officer.

8. Q. What is the rule as to intoxicants?

A. The use of intoxicants by employes while

on duty is prohibited. Their use, or the frequenting of places where they are sold, is sufficient cause for dismissal.

9. Q. May employes use tobacco when on duty in or about passenger stations or passenger cars?

A. No.

10. Q. Must employes on duty wear the prescribed badge or uniform?

A. Yes.

11. Q. Do you understand that persons authorized to transact business at stations or on trains must be orderly?

A. Yes.

12. Q. In case of danger to company's property, what is expected of employes?

A. They must unite to protect it.

EXPLANATION. — All employes examined should be in possession of the book of special instructions relating to their duties, also current time-table.

The duties of railway men are such that they must be in good condition mentally in order to properly perform their duties, therefore the use of intoxicants is forbidden. The use of tobacco is forbidden about stations or passengers because it is annoying to patrons.

As a railroad company is judged largely by its employes, the company must insist that employes be courteous and neat in appearance, for upon the attitude of the public depends its success or failure.

DEFINITIONS.

13. Q. What is an engine?

A. A locomotive propelled by any form of energy.

EXPLANATION.—This definition is so worded that it covers electric motors, gasoline motors, etc., the word “engine” being understood to mean a locomotive, regardless of the manner in which it is propelled.

14. Q. What is a train?

A. An engine, or more than one engine, coupled, with or without cars, displaying markers.

EXPLANATION.—The word “train” signifies an engine and also markers. If an engine, with or without cars, has no markers, it cannot be considered a “train.”

15. Q. What is a regular train?

A. A train authorized by a time-table schedule.

EXPLANATION.—An extra train moving over the road each day cannot be considered a “regular train.” It must be a train scheduled on the time-table.

16. Q. What is a section?

A. One of two or more trains running on the same schedule, displaying signals or for which signals are displayed.

EXPLANATION.—Each section has equal time-table authority. See Rule 95.

17. Q. What is an extra train?

A. A train not authorized by a time-table schedule.

18. Q. How many kinds of extra trains are there and how are they designated?

A. Two. Extra, for any extra train except work extras; and work extra, for work train extra.

EXPLANATION.—The rules governing a work extra are different than those governing an extra train, so the distinction must be preserved.

19. Q. What is a superior train?

A. A train having precedence over another train.

EXPLANATION.—A train may be made superior to another by train order or by time-table provision, and when made superior by either provision it is governed by the rules referring to superior trains.

20. Q. What is a train of superior right?

A. A train given precedence by train order.

EXPLANATION. — Wherever the word “right” is used in the rules it refers to a train order. For example: a train which is inferior or superior by “right” is a train which has been made so by train order.

21. Q. What is a train of superior class?

A. A train given precedence by time-table.

EXPLANATION.—Each time-table shows schedules of different classes, as first class, second class, etc. First class trains are superior to second class trains, second class trains are superior to third class trains, etc.

22. Q. What is a train of superior direction?

A. A train given precedence in the direction specified in the time-table as between trains of the same class.

EXPLANATION.—On single track roads where Standard Rules are in effect the time-table states the superior direction of trains. A train of the second class moving in the superior direction is superior to a train of the same class in the opposite direction; but it is inferior to a first class train in the opposite direction. Thus superiority of direction is limited to apply only between trains of the same class.

23. Q. Does superiority of direction affect trains on double track?

A. No; it is limited to single track.

24. Q. What is a time-table?

A. The authority for the movement of regular trains subject to the rules.

25. Q. What does the time-table contain?

A. The classified schedules of trains with special instruction relating thereto.

26. Q. What is a schedule?

A. That part of a time-table which prescribes class, direction, number and movement for a regular train.

EXPLANATION.—The schedule should not be confused with the train. A train using schedule No. 25 is known as train No. 25.

27. Q. What is a division?

A. That portion of a railroad assigned to the supervision of a superintendent.

28. Q. What is a sub-division?

A. A part of a division so designated on the time-table.

29. Q. What is a main track?

A. A track extending through yards and between stations, upon which trains are operated by time-table or train order, or the use of which is controlled by block signals.

30. Q. What is a single track?

A. A main track upon which trains are operated in both directions.

31. Q. What is a double track?

A. Two main tracks, upon one of which the current of traffic is in a specific direction and upon the other in the opposite direction.

32. Q. What is the definition to, "Three (or more) Tracks?"

A. Three (or more) main tracks, upon any of which the current of traffic may be in either specified direction.

33. Q. What is a current of traffic?

A. The movement of trains on a main track in one direction specified by the rules.

34. Q. What is a station?

A. A place designated on the time-table by name at which a train may stop for traffic; or to enter or leave the main track; or from which fixed signals are operated.

EXPLANATION.—An inferior train must consider the switch where it enters the siding as the station. The superior train must also consider this switch as the station with respect to its schedule time or a meeting order which it may hold.

35. Q. What is a siding?

A. A track auxiliary to the main track for meeting or passing trains, limited to the distance between two adjoining telegraph stations.

36. Q. What is a fixed signal?

A. A signal of fixed location indicating a condition affecting the movement of a train.

37. Q. Name some fixed signals?

A. Slow Boards, Stop Boards, Yard Limit Boards, Switch Signals, Train Order, Block, Interlocking, Semaphores, Disc, Ball or other means of indicating stop, caution or proceed.

38. Q. What is a yard?

A. A system of tracks within defined limits provided for the making up of trains, storing of cars and other purposes, over which movements not authorized by time-table, or by train order, may be made, subject to prescribed signals and regulations.

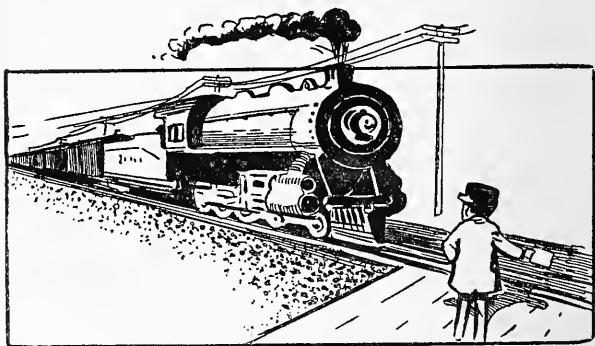
39. Q. What is a yard engine?

A. An engine assigned to yard service and working within yard limits.

40. Q. What is a pilot?

A. A person assigned to a train when the engineman or conductor or both are not fully acquainted with the physical characteristics or running rules of the road or portion of the road over which the train is to be moved.

NOTE.—Preferably a pilot should be an engineman and he should run the engine of the train which he pilots.



RULES FOR SINGLE TRACK

Rule 1.

113. Q. From where is Standard Time obtained?

A. (See Rule 1.)

114. Q. At what time each day is time received?

A. (The answer to this question will be found in Rule 1.)

115. Q. What watches must conductors and enginemen use?

A. Watches that have been examined and certified to by a designated inspector.

EXPLANATION.—Before starting on each trip, conductors and enginemen and such other employes as may be designated must compare watches with a clock designated as a “standard clock.” The time watches are compared is usually registered. The Standard Code as amended April, 1906, provides that conductors and enginemen and such other classes of employes as may be desired, shall have standard time. Formerly the code provided that conductors and enginemen only were required to have their watches inspected.

Rule 2.

116. Q. How often must the certificate be renewed and with whom must it be filed?

A. (See Rule 2.)

117. Q. What is maximum variation for watches?

A. Thirty seconds per week.

EXPLANATION.—The Standard Code leaves

the length of time for renewing the certificate discretionary; also the officer with whom it is filed. Usually they are filed with the superintendent every six months.

Rule 3.

118. Q. Are all clocks used by this company standard?

A. No; only clocks designed as "standard clocks" must be used for comparing time.

119. Q. How often are conductors and enginemen required to compare their watches with the standard time?

A. Before starting on each trip.

120. Q. In the event of their not having access to a standard time-piece, how will they obtain standard time?

A. From conductors or enginemen who have registered, or from the superintendent.

121. Q. Should time watches are compared be registered?

A. Yes.

EXPLANATION.—When a train is laid up for rest at a point where there is no "standard clock," crew may compare watches with the engineman or conductor of some other train which stops there; or if none stops time can be obtained by wire from the train dispatcher.

A. R. A. Ruling.—Question. We have seven branches on which one or more of the crews start in the morning from the end of the road, come to the junction point with the main line and return to the end of the road in the afternoon. It is our intention to have standard clocks at junction points, and I would be pleased to know if we would be conforming to the rule by having the men regulate their watches when they arrive at the junction point, or whether we should have

a standard clock at the end of each of these branches.

Answer.—The committee decides that it would be entirely in conformity with the spirit of the rule to put standard clocks at the junction points, covering the same by special instruction.—Ruling March 19, 1912.

Rule 4.

122. Q. When does the new time-table supersede the old?

A. On the moment it takes effect.

122. Q. When does its schedules take effect?

A. At the leaving time at their initial stations on such division (or subdivision).

122b. Q. Is there any other method of putting a schedule of the new time-table into effect?

A. Yes.

122c. Q. State the circumstances under which a schedule may become effective before it is due to leave its initial station after the time table takes effect?

A. When a schedule of the preceding time table corresponds in number, class, day of leaving, direction, and initial and terminal stations with a schedule of the new time table.

122d. Q. From what point is such schedule effective?

A. From the point where the train using the schedule on the old time-table makes under the old time-table.

122e. Q. What do the words "Day of Leaving" mean?

A. They refer to the date of leaving.

123. Q. How is the date of a train determined?

A. By the date of its schedule time at its initial station on a division (or subdivision).

124. Q. May more than one schedule of the same number and date be in force on any division or subdivision?

A. No. Except to provide continuous movement when schedules correspond.

125. May a train of the old time-table which has become 12 hours late on the old time-table assume the new time-table schedule if schedules correspond as required?

A. No.

126. Q. How will a train of the old time-table proceed if it has a corresponding number, class, day of leaving, direction and initial and terminal stations?

A. It will retain its train orders and assume the schedule of the corresponding number of the new time-table.

127. Q. If a train of the old time-table has not the same number, class, day of leaving, direction and initial and terminal stations, how will it proceed?

A. It can proceed only on train order.

127a. Q. If schedules of the old and new time-table fail to correspond in one point only may a train of the old time-table assume the new schedule?

A. No. Schedules must correspond in every particular.

127b. Q. In case there are two or three sections on No. 1, of the old time-table may all sections proceed on the new schedule if schedules correspond as required?

A. Yes.

EXPLANATION.—A train leaving its initial station carries its date (the date on which it was due to start) with it. If the time-tables change while it is on the road it still holds the date it started with and can use the schedule of that date if it corresponds as to number, class, day of

leaving, direction and initial and terminal stations. If they do not so correspond it cannot assume the new schedule.

Only one schedule of the same date can be in effect to authorize a train to leave its initial station, that is, if No. 1 has left its initial station on the old schedule for June 1st it cannot leave on the new schedule for June 1st regardless of the fact that it may be due to leave its initial station after the new time-table takes effect.

The second sentence of Rule 4 has the same meaning as if it read, "But when a schedule of the new time-table corresponds in number, class, day of leaving, direction and initial and terminal stations with a schedule of the preceding time-table, a train which at time of change is authorized by the preceding time-table will retain its train orders and assume the schedule of the corresponding number of the new time-table which schedule shall thereby become effective, from that point to its terminal, subect to Rule 82."

When a new time-table shows a schedule which has no corresponding numbered schedule on the old time-table such schedule shall not be in effect unless due to leave its initial station after the new time-table takes effect.

Whenever schedules correspond in all requirements except that the schedule is later on the new time-table, a train using the old schedule must stop at the last station which it can make before the new time-table takes effect and wait until the new schedule is due, otherwise it would be ahead of time, between stations, with no schedule protection. In such a case it would have to protect by flag.

Extra trains which are on the road do not lose their right to run when a change of time-table takes place.

The last paragraph of the rule has the same

meaning as if it read, "Not more than one schedule of the same number and day shall be in effect on the same portion of a division of subdivision." That is, there was no intention of forbidding two schedules of the same number and day being in effect on different portions of the division in case a train of the old time-table is entitled to assume the new schedule at some point on the division under the authority of Rule 4.

"Day of leaving" means, date of leaving. That is, it does not refer to the day or days of the week on which a schedule is effective—but it does refer to the date of the train or schedule. For example, No. 6 leaving its initial station December 1st, is a train of December 1st, and can only assume a schedule which corresponds as to day of leaving, or "date." That is to say it can only assume a schedule of December 1st.

In case No. 1 of June 15th leaves A at 11 p. m., and at 2 a. m. the 16th a new time-table takes effect, showing No. 1 due to leave A at 1 a. m. In such a case the train on the road would be a train of the 15th and the only schedule it could assume would be one of the 15th and as that schedule was, according to the new time-table, due out of A at 1 a. m. the 15th, 25 hours before, the schedule would be dead, and the train on the road can proceed only on orders. The schedule of the 16th in such a case is due out of its initial station one hour before the new time-table took effect, and under the rule, this schedule cannot be in effect the 16th for the reason that the schedule of the train which was on the road did not correspond with this new schedule as to "date" and unless a schedule corresponds with an old schedule in all the particulars noted it cannot be in effect until due to leave its initial station after the new time-table takes effect; in this case that would be at 1 a. m. the 17th.

If No. 1 of the 15th was due to leave its initial station at 1 a. m. and arrive at its terminal at 3 a. m. a new time-table takes effect at 4 p. m. showing No. 1 due to leave its initial station at 6 p. m. and arrive at its terminal at 8 p. m. In such a case No. 1 could not run on the new time-table for the reason that the old schedule would be over 12 hours late before the new time-table took effect, so there would be no train to assume the schedule, and because one schedule of that number had been in effect over the entire division for that day no other schedule of that number could be in effect for that date. If, however, No. 1 on the new time-table was due to leave its initial station on the new time-table at, say, 5 a. m., if the schedules corresponded as required then No. 1 of the old time-table could assume the new schedule, whether or not it had been started from its initial station. Or in case there were two sections on No. 1, the first one being on the road and the second one not out of its initial station when the new time-table took effect, the second one could wait until 5 a. m. and leave on the new time-table as second section and the first one could assume the new time-table on the road when the schedule became due, and display signals as before.

On certain subdivisions, the time-table should specify from what station trains take their date.

A. R. A. Ruling. Q. On time-table No. 1, train No. 88 is due to leave A at 1 a. m. Time-table No. 2 becomes effective at 1 a. m., June 10th, and it shows No. 88 due to leave A at 12:01 a. m. Train No. 88 on time table No. 2 corresponds in number, class, day of leaving, direction, initial and terminal stations with the same train on time-table No. 1. The question is: Is train No. 88 authorized to run on the date the new time-table takes effect?

A. While schedule No. 88 corresponds on time-table No. 2, in number, class, day of leaving, direction, initial and terminal stations with schedule 88 on time-table No. 1, the schedule was not in effect at the time of change, so that no train could be authorized to assume it. Therefore No. 88 was not authorized to run on the date the new time table became effective, and cannot start from its initial station until 12:01 a. m. the following day.

CRITICISM.—“A train authorized by the preceding time-table” can only mean one which was then in the territory controlled by such preceding time-table. But the rule is intended to also include an overdue train not then in such territory.

“Day of leaving” is confused with heading of schedule which shows days on which the schedule is effective.

The second paragraph fixes the date of a schedule but fails to conform to the wording, “Day of leaving” as referred to in the first sentence. This results in much misunderstanding.

The last paragraph in its present form refutes the authority of the first sentence which permits a train to assume the new schedule, thereby acknowledging that two schedules are to be in force on the same day. What it really means is that but one schedule of the same number and date can be used on the same part of a division.

Rule 4 is a great improvement upon the former rule in some respects, but too much of it is left to inference. The rule states that schedules take effect at the leaving time at their initial station, but when a schedule corresponds in number, etc., a train may retain its orders and assume such schedule. It will be noted that the rule does not state that such schedule shall be in effect. We regret that the rule does not state definitely that

such schedule will take effect the moment the new time-table takes effect, for that is exactly what the rule is intended to mean.

We hold, and with reason, that an order to assume a schedule does not and should not, make such schedule valid unless the rule says that it shall be in effect, for the assuming of a schedule is one thing and its validity quite another. For example: The train dispatcher may issue an order for some engine to run as No. 1, but if the schedule of No. 1 is more than twelve hours over-due or is invalid for any reason the engine cannot assume the schedule notwithstanding the fact that it holds an order to do so; for this reason it must be plain to anyone that an order to assume a schedule must not be construed as an order giving such schedule life. In the case under consideration the rule declares that schedules shall take effect at their leaving time and this makes it necessary that the leaving time be after the time-table is in effect.

In view of the serious nature of the rule and its effect on opposing trains, the time when a schedule takes effect should be more clearly defined. Those who constructed this rule should have remembered that opposing trains, as well as the train directly concerned, must know exactly what other schedules are good and what are not, and with the many requirements named by this new rule and with the number of things which are left entirely to inference, the rule lays a very heavy burden upon trainmen.

The last paragraph of the rule makes it impossible for more than one schedule of the same number and day to be in effect on any division. Under this last paragraph how is a train to assume a corresponding schedule, even though we admit that the authority to assume a schedule makes it valid, for the old schedule having been in effect makes it impossible for the new schedule

to go into effect on that division on that day, unless the last paragraph of this rule is interpreted to mean that only one schedule at a time shall be in effect. If this latter interpretation is put on the rule then there is nothing in it to prevent seven or eight schedules from being effective at different times during the day over the same portion of track.

Some hold that the new schedule is a continuation of the old schedule, and therefore only one schedule is considered as having been in effect during that day, but such an understanding is too vague to be embodied in a rule. The words "assume" and "corresponding schedule" used in the rule are in themselves evidence sufficient to prove that the new schedule was not considered a continuation of the old.

The paragraph really means that not more than one schedule of the same number and day shall be in effect over the same portion of a division. That is it is intended to make the new schedule good from where the train of the old schedule picks up the new schedule. We hope this rule will be amended so as to say what it means.

In place of the present Rule 4 we suggest a rule as follows:

4. "Each new time-table, from the moment it takes effect, supersedes the old time-table and its schedules take effect on any division (or sub-division), at the leaving time at their initial stations on such division (or sub-division); except that when a schedule of the new time-table corresponds in number, class, date of leaving, direction and initial and terminal stations with a schedule which was then in effect by the old time-table, it will take effect at once, subject to the provisions of Rule 82, and a train due on the division (or sub-division) by the old time-table

will assume the schedule of the same number of the new time-table and retain its train orders.

"Schedules on each division (or sub-division) date from their initial stations on such division (or sub-division)."

"But one schedule of the same number and date can be used over the same part of a division (or sub-division)."

With a rule like the above very little is left to be inferred and the subject of date is referred to as "date" in each case, instead of "day of leaving" and "day" and "date" as is done in the Code Rule.

Rule 5.

128. Q. How many times are shown on time-table at any station?

A. Not more than two.

129. Q. When one is shown, what is it, if not otherwise indicated?

A. Leaving time.

130. Q. When two are shown, what are they?

A. The arriving and leaving time.

131. Q. Where does the time at a station apply?

A. Unless otherwise indicated, the time applies to the switch where an inferior train enters the siding; where there is no siding it applies to the place from which fixed signals are operated; where there is neither sidings nor fixed signals, it applies to the place where traffic is received or discharged.

132. Q. How are schedule meeting or passing stations indicated?

A. By figures in full faced type.

133. Q. When both the arriving and leaving time of a train are in full faced type what does it indicate?

A. That both are meeting or passing times or that one or more trains are to be met or pass it between those times.

134. Q. When a train takes a siding, extending between two adjoining stations, to be passed by one or more trains, how will the schedule indicate this?

A. The time at each end of the siding will be shown in full faced type.

135. Q. Where there are one or more trains to meet or pass a train between two times or more than one train to meet a train at any station, how is attention called to it?

A. (The Standard Code leaves the sign discretionary; this sign will be found in Rule 5 of your book of rules.)

EXPLANATION.—Rule 5 provides that not more than two times shall be given for a train at any station; where one is given it is, unless otherwise indicated, the leaving time; where two are shown they are the arriving and leaving time. Opposing inferior trains must consider that the leaving time applies to the first entrance switch to the siding at each station. If there is more than one siding, or more than one switch, the timetable should be so arranged as to designate the particular switch that opposing trains must use and the time of a superior train would apply at such switch.

For inferior trains running in the same direction where the leaving time only is shown, the arriving time must be considered as being the leaving time at the preceding station. For example: No. 1, a first class train, is due to leave A at 1:10 a. m., B at 1:15 a. m., and C at 1:25 a. m.; an inferior train moving in the same direction must clear No. 1 at B at 1:10 a. m., and at C at 1:15 a. m. Opposing trains of the same class must clear at B at 1:15 and at C at 1:25. Oppos-

ing trains of inferior class must clear five minutes before No. 1 is due at these stations, as before stated; so far as opposing trains are concerned the time of No. 1 applies at the switch where opposing inferior trains usually take siding.

Where stations are over ten or twelve miles apart this arrangement would cause a great deal of unnecessary delay to inferior trains moving in the same direction, and to overcome this dummy stations may be established between the regular stations, where time may be shown on the time-table so that the clearance of inferior trains would not necessarily be so long. In establishing these extra stations all that would be required would be a sign board with the name of the station on it, and the name shown in the time table.

In making time-tables the provisions of Rule 5 should be fully considered, for in case the siding at any station is some distance in either direction from the station, the time will apply at this siding and not at the station, and figures should be arranged accordingly.

In examining trainmen this point should be impressed upon them, although it must be understood that trains which take on passengers or freight at a station should not leave such station ahead of schedule time.

Where but one time is shown at a station for a train, it is the leaving time, unless otherwise provided, and the leaving time does not govern or control the arriving time at all, the idea being that No. 301 is due to arrive at B as soon as it is due out of A. That is to say, when no arriving time is shown and an arriving time must be figured on, such arriving time must be considered as being the leaving time at the preceding station.

In short, this rule is the authority upon which time-table schedules are constructed and it also governs the application of the time shown on such

schedules. Suppose that No. 55, an inferior train, leaves A to go to B for No. 2. The siding at B is located one-half mile beyond B in the direction of C. No. 2 is a local passenger train which stops regularly at B. A common error in such cases is to suppose that the time shown on the schedule of No. 2 at B applies at the station; but such is not the case. It applies at the switch one-half mile toward C from B. From this it can be seen that it is of great importance that this point should be thoroughly understood, otherwise No. 2 might pass the switch before No. 55 arrived and collide with No. 55 between B station and the siding.

In some cases the station is located near the crossing of some other road and the operator at such crossing operates signals, while there are no signals at the station which is a half mile or more distant. In such a case, if there are no sidings at the station, the time applies at the crossing and not at the station. This interpretation is authorized by Rule 5, but because the public is not expected to figure upon this point, in case of a passenger train, trainmen should be careful not to pass the station or the crossing before the time shown on the schedule.

The rules should be so revised as to state that where no arriving time is given a first class train may arrive at a station five minutes in advance of its schedule leaving time, and a second or inferior class train may arrive at a station twenty minutes ahead of its leaving time. With such an arrangement trainmen would not be required to guess at the probable arriving time of a train.

Attention is drawn to the fact that class, direction and other authority giving adjuncts to the time table schedule depend for effectiveness upon the time shown by the schedule. Thus we find that all time-table authority depends upon

schedule time and therefore schedule time furnishes the limitations for schedule authority. Let us suppose that No. 6 is scheduled from A to Z, the siding at A and Z being, say, half a mile in advance of such stations. The question of the authority of No. 6 to hold main track at A and Z arises. The answer is found in Rule 5 which limits the right of and makes the time of a train apply at the entrance switch, therefore No. 6, under the rules, has no authority to hold main track at A to Z (except under direction of yard master, if within yard limits).

A. R. A. RULING.

Question 1. The schedule leaving time of train 800 at Dover, a terminal station, is 1:10 p.m. The schedule arriving time of train 801 at Dover is 1:10 p. m. Is Dover a regular meeting or passing point for those two trains and is it to be indicated on the time-table in full faced type? Trains 800 and 801 are first class trains, No. 800 being the train of superior right.

2. The schedule leaving time of train 800 being 1:11 p. m. and the schedule arriving time of train 801 being 1:10 p. m., is Dover still to be regarded as a regular meeting or passing point and full faced type used? If the response to the second query be "yes," then what difference in the leaving and arriving times will warrant us in regarding Dover as no longer the regular meeting or passing point?

Answer. In response to the first question, the committee's answer is "yes," and to the second question, "no."

Question. Under the Standard Code of Train Rules, can a light engine running as first section of regular train No. 2 (a mixed train) be given an order by the dispatcher to run ahead of time?

Answer. The Standard Code does not provide

for the running of a regular train ahead of time. In the opinion of the committee, the practice should not be permitted.

Ruling 1905.

Rule 6.

136. Q. How are regular stops, flag stops and meal stops indicated?

A. "S" for regular stop, "F" for flag stop and a paragraph sign for meal stops.

137. Q. What do "L" or "A" indicate?

A. "L" indicates leave; "A" arrive.

138. Q. What does "S" indicate?

A. Regular stop.

139. Q. What does "F" indicate?

A. Flag stop to receive or discharge passengers or freight.

140. Q. What does a paragraph sign indicate?

A. Stop for meals.

EXPLANATION.—This rule governs the use of special markings on the time-table which are used to indicate certain movements. The characters are generally used as prefixes to the schedule time.



SIGNAL RULES

Rule 7.

141. Q. With what appliances must employes, whose duty it is to give signals, be provided, and when should they be ready for use?

A. With proper signal appliances ready for immediate use.

EXPLANATION.—Care should be taken to see that signals are in good condition. They must not be dirty or faded to such an extent that the indication cannot be clearly given.

Those giving signals must locate themselves so as to be plainly seen. Signals must be given in the prescribed manner. All trainmen must use great care to avoid taking the wrong signal, and should not move unless they are sure the signal given is for them.

Trainmen and others must be on the lookout for signals and be prepared to act if necessary. This is specially true of passenger train employes, in case air should give out.

Rule 8.

142. Q. What signals are used by day, and what signals at night?

A. Flags of the prescribed color must be used by day and lamps of the prescribed color at night.

EXPLANATION.—Promptness and exactness in the use of signals is of great importance. Care should be exercised to keep both day and night signals clean and in perfect order.

Rule 9.

143. Q. When are night signals to be displayed?

A. From sunset to sunrise; also when weather or other conditions obscure day signals.

EXPLANATION.—Whenever weather or other conditions obscure day signals, night signals must be displayed in addition to the regular day signals.

VISIBLE SIGNALS.

Rule 10.

150. Q. What does red signify?

A. Danger; stop.

151. Q. What does white signify?

A. Safety; proceed; and for other uses prescribed by the rules.

152. Q. What does green signify?

A. Caution; proceed with caution; and for other uses prescribed by the rules.

153. Q. What does green and white, when shown together, signify?

A. Flag stop for passengers or freight.

154. Q. What does blue signify?

A. That cars thus protected must not be moved.

EXPLANATION.—The Standard Code leaves the color signal "Proceed" and "Caution" discretionary with each road to use the color it may prefer. Some use green for "Proceed" and yellow for "Caution." The Train Rules Committee of the American Railway Association originally recommended white for "Proceed" and green for "Caution" as indicated by questions No. 151 and No. 152. Some roads use other signals for these purposes and this fact must be taken into account when passing examinations.

Rule 11.

155. Q. When may a red fusee be passed?

A. Not until burned out.

156. Q. When a green fusee is used what is it?

A. A caution signal.

EXPLANATION.—Care should be taken in throwing fusees to see that they do not fall near wooden structures on account of the danger of fire. They should be placed to the right of the track in the direction of movement.

A green fusee is a caution signal and may be passed, but the train passing it must proceed with caution, expecting to receive a stop signal or to overtake another train.

HAND, FLAG AND LAMP SIGNALS.

Rule 12.

157. Q. What is the hand, flag or lamp signals for stop?

A. Swung across the track.

157. Q. For Proceed?

A. Raised and lowered vertically.

158. Q. For Back?

A. Swung vertically in a circle at half-arm's length across the track when train is standing.

159. Q. For Train Parted?

A. Swung vertically in a circle at arm's length across the track when train is running.

60. Q. To apply air?

A. Swung horizontally above the head when train is standing.

161. Q. To release air?

A. Held at arm's length above head when train is standing.

EXPLANATION.—The above signals are mo-

tion signals, as the indication depends upon the movement which is given the signal. Care should be used in giving these signals as the speed at which a signal is given indicates how it should be obeyed. If given rapidly, move rapidly; if given slowly, move slowly. Care should be used to give the signals exactly as required by rule.

Rule 13.

162. Q. When any object is waved violently by anyone on or near the track, how should it be considered?

A. A signal to stop.

EXPLANATION.—Sometimes persons not employed by the railway see a condition of danger and try to warn an approaching train. It was to cover such cases that Rule 13 was framed.

AUDIBLE SIGNALS.

Rule 14.

Engine Whistle Signals.

163. Q. What is the signal to stop and apply brakes?

A. One short blast of whistle.

164. Q. What is signal to release brake?

A. Two long blasts of the whistle.

165. Q. What is the **engineman's** signal for the flagman to go back and protect the rear of train?

A. One long and three short blasts of whistle.

166. Q. What is the signal to call flagman from south and west?

A. Four long blasts of whistle.

167. Q. What is the signal to call in flagman from north and east?

A. Five long blasts.

168. Q. What is the signal from engine that train has parted?

A. Three long blasts of whistle.

169. Q. Should this signal be repeated and how often?

A. Yes; until answered.

170. Q. What signal does the engineman use to answer a visible signal that train has parted?

A. Three long blasts of whistle.

171. Q. What is the signal from trainmen to answer a signal from engineman that train has parted?

A. Hand, flag or lamp swung vertically in a circle at arm's length across the track.

172. Q. What signal is used to answer any signal not otherwise provided for?

A. Two short blasts of whistle.

173. Q. What is the signal to back when train is standing?

A. Three short blasts of whistle.

174. Q. What is three short blasts of the steam whistle used for when train is running?

A. Answer to conductor's signal to stop at the next station.

174. Q. What is the answer to hand, flag or lamp signal to back?

A. Three short blasts of whistle.

175. Q. What is the engineman's call for signals from switch tenders, watchmen, trainmen and others?

A. Four short blasts of whistle.

176. Q. What is one long and two short blasts of the steam whistle used for?

A. To call the attention of yard engines, extra trains or trains of the same or inferior class or inferior right, to signals displayed for a following section.

177. Q. What is the signal for public crossings at grade?

A. Two long and two short blasts of whistle.

178. Q. What is the signal for approaching stations, railroad crossings and junctions at grade?

A. One long blast of whistle.

179. Q. What is a succession of short blasts of the whistle?

A. An alarm for persons or cattle on track.

EXPLANATION.—Care should be taken to see that signals are correctly given, and infractions of these rules should receive prompt attention. Special care should be used in giving whistle signals in stormy weather. The signals should be clear and distinct, and with intensity and duration proportionate to the distance the signal is to be conveyed.

Signal 14K refers to trains which are made superior by train orders as well as to trains of the same or inferior class. Should a train fail to answer this signal the train giving it should immediately stop and not proceed until the signal is acknowledged.

Rule 14C is not intended for ordinary use in the operation of trains, but is intended for use when the engine crew know of a situation which the train crew might not otherwise know.

The fixed signals are not to be answered by the engineman, but all other signals given to stop a train whether by hand, lamp, flag, fusees or torpedoes, should be answered by two short blasts of the steam whistle, unless the rules specially provide for some other answer.

CRITICISM.—Rule 14K of the Standard Code is one that, in our opinion, could be dispensed with. If it is desirable at all that a whistle signal be used on double track in connection with signals carried for a following section, such sig-

nal should be given to trains in the opposite as well as to trains moving in the same direction, for these opposing trains may have occasion to cross over to do work.

On single track the operation of the rule is not uniform, as it provides an auxiliary signal for those who ought not to require it and leaves the weaker points that are directly affected by signals displayed, open. For example: There are usually five men on a train to observe signals while at junction points; where the operator or switchman is required to register trains, there is but one man. The rule does not give this one man the benefit of the auxiliary signal, if such signal can be called a benefit, but it does furnish an auxiliary signal for the five men.

The rule has a tendency to lead trainmen to depend on the audible signal instead of the visible signal, as it requires less effort on the part of trainmen. There is also grave danger that this audible signal will become the principal signal and, as it is purely a matter of memory with the enginemen of the train which is displaying signals in each case, it might be very easily overlooked by him, and as a matter of fact, it has been overlooked a great many times. With the visible signal the situation is somewhat changed, as there is a permanent feature about it, and the only ones required to remember are the trainmen who are directly interested in knowing what signals are displayed. Another bad feature of the rule is that it requires a great amount of whistling on a busy railroad, and this whistling is very annoying to passengers, especially at night.

A. R. A. RULING.

We have recently had a bad accident that occurred through an engineman overlooking his

meeting orders and inability of the conductor to stop the train. * * * Feeling the necessity for a rule requiring communication between conductors and enginemen of passenger trains, I have prescribed the following for use on our lines. * * * , and I would bring to the attention of the association the necessity of incorporating some such signal in the Code Rules: "Conductors of passenger trains, when approaching meeting points, whether by schedule or train order, must in all cases give two long and one short blast of the air whistle, as notice to the engineman that the train is approaching a meeting point, and the engineman must promptly acknowledge his understanding of the same as provided in Rule 14G."

Answer. Rules supplementary to the Code may be formulated by railways upon which the conditions of the service are not fully met by the Code Rules, when such supplementary rules are in accordance with the principles of the Code. The committee does not deem it wise to incorporate in the Code rules which are of special application to the requirements of particular railways, and objectionable for use on other railways, upon which it may be advisable to provide for conditions in a different manner.

Ruling March 19, 1902.

Q. If No. 23 a second class train which is displaying signals for a following section receives a train order to meet No. 4 at B, and no sections of No. 23 are mentioned. Is it not as important in such a case that whistle signal 14k be given to a train of superior class as to a train of the same or inferior class? No. 4 is a first class train.

A. Whistle signal 14k is merely an auxiliary requirement, and the identity of trains is not dependent thereon; therefore it is non-essential, and might be dispensed with altogether without

jeopardizing safety of operation. In the opinion of the committee it would be objectionable to extend its application to superior trains, for the reason that the great increase in whistling that would result therefrom would be seriously annoying to passengers, particularly at night.

In framing Rule 14k the committee relied upon the provisions of Rule 218, which, in the case referred to, would require the conductor of No. 4 to find out and meet all the sections of No. 23.—March 8, 1901.

Q. In connection with the general train and interlocking rules, as approved by the board of railway commissioners for Canada, July 12th, 1909, I wish to draw your attention to Rule 20, train signals: "All sections, except the last will display two green flags, and, in addition, two green lights by night, in the places provided for that purpose on the front of the engine."

Also to part of Rule 31, "Use of Signals:

"Signal 14k must be sounded by a train displaying green signals for a following section, to call attention of extra trains or trains of the same or inferior class or inferior right to signals displayed, and must hear the answer 14 (o), or stop and notify them of green signals displayed."

We had a case recently where a regular passenger train was running in two sections, the first carrying green signals. An extra freight train, which was in a siding at a nontelegraph station to clear the regular passenger train, proceeded after the first section passed, the crew claiming that they did not observe any green signals on the passenger train, nor did they hear whistle signal 14(k). The engineer on the passenger train claimed that he did give signal 14(k), and that his fireman told him that he noticed steam escaping from the whistle of the engine in the siding as though they were answering the signal,

but neither the engineer or the fireman heard the whistle.

We have positive evidence that both signals were burning on the regular passenger train several stations beyond the point where they met the freight. We also have positive proof that one of the signals was not burning at a station beyond the point where the freight train was on the siding.

It is clear, of course, that the crew on the passenger train neglected to either hear this answer to their signal 14(k), or stop and notify the crew of the freight that they are carrying signals. It was also the duty of the crew in the siding to observe closely and see whether signals were carried.

In the event of signals on a section being obscured or going out, we are depending entirely on the engineer to give signal 14(k) and getting the answer, or stopping and notifying the crew on the siding that signals are carried, to prevent what might be a very serious accident.

To overcome this apparently weak point, I would be glad to have your opinion as to the method of carrying signals on all regular trains when there is only one section, and when more than one section signals to be carried only on the last section. By this means, if the signals fail or the men fail to give warning, the worst that can happen is delay to the train, that might be on the siding.

Answer. The committee considers Standard Code train rules Number 20 and 14 amply sufficient for the safe movement of trains when run in sections, and that success with rule 20, as with other rules of the Code, depends upon its being obeyed. It does not feel warranted in expressing an opinion concerning a practice which has not met with the formal sanction of the Ameri-

can Railway Association, and would further suggest that the practice which it is proposed to substitute for the Standard Rule is not supported by sufficient trial or experience to justify the committee in recommending its use or adoption.—April 18, 1911.

Rule 15.

180.Q. What does the explosion of one torpedo indicate?

A. Stop.

181. Q. What does the explosion of two torpedoes not more than 200 feet apart indicate?

A. Reduce speed and look out for stop signal.

EXPLANATION.—Torpedoes should not be placed near stations or crossings or where people pass them. This for the reason that there is grave danger of injury to persons who may be close to the track when torpedoes are exploded.

Torpedoes should never be depended upon to stop trains for the reason that they may become dislodged either by accident or intentionally by some person passing.

COMMUNICATING SIGNALS

Rule 16.

182. Q. What does two blasts of air whistle indicate when train is standing?

A. Start.

183. Q. What does two blasts of air whistle indicate when train is running.

A. Stop.

184. Q. What does three blasts of air whistle indicate when train is standing?

A. Back.

185. Q. What does three blasts of air whistle indicate when train is running?

A. Stop at next station.

186. Q. What does four blasts of air whistle indicate when train is standing?

A. Apply or release brakes.

187. Q. What does four blasts of air whistle indicate when train is running?

A. Reduce speed.

188. Q. What does five blasts of air whistle indicate when train is standing?

A. Call in flagman.

189. Q. What does five blasts of air whistle indicate when train is running?

A. Increase speed.

EXPLANATION. — The signal to apply brakes when testing brakes should be given from forward car, and the signal to release brakes should be given from the rear car; this will test as to whether the signal is working properly.

Some years since the Association adopted two short pulls of the cord as a signal to start the

train when standing, and retained the same two short pulls to stop the train when running. The argument was given that one pull given accidentally, as by a trunk being stowed in a baggage car, or by an unauthorized person, would cause the engineman to start the train and perhaps injure someone. The fact, also, that one blast may result from turning the angle cock after coupling the hose had a bearing on the decision. It has been contended that these conditions could have been met by requiring the one pull to start to be confirmed, when practicable, by a hand or lamp signal before being acted upon by the engineman, who would look back upon hearing the sound.

CRITICISM.—The objection to having the same signal for starting and stopping is the confusion that may result in the doubtful moment when a train is just pulling out. If the proceed signal is given before the engineman is ready, he may be just opening the throttle when the trainman repeats the signal thinking that it has not been heard the first time. The engineman then may not know whether to stop or to keep on. Again, the trainman may be wanting to stop the train to avoid dragging someone. The engineman, thinking it a repetition of the proceed signal which he has been slow in obeying, may keep going and an avoidable personal injury result.

TRAIN SIGNALS

190. Q. What signal must be provided on the front of a train after sunset?

A. A head-light.

191. Q. When should head-lights on engines be covered?

A. When a train turns out to meet another and has stopped clear of main track, or is standing

to meet trains at the end of double track or at junctions.

192. Q. Should head-light be screened before train is clear and switches right?

A. No.

193. Q. In case there are two trains at a station for an opposing train and the second train cannot clear account siding too short, will they depend for protection on the head-light of the leading train not being screened?

A. Certainly not. A flagman should be sent out immediately by the second train to give full protection.

194. Q. Why then should the head-light of the leading train be left unscreened?

A. Because the train cannot properly be considered clear of the main track as the main track switch remains open for the second train. When the switches are properly closed and not before, may headlight be screened.

EXPLANATION.—It is held by some that where more trains are at a station to meet an opposing train than the siding will hold, that the leading engine should screen its head-light so as not to blind the engineer of the approaching train. But we think that it is doubtful that it would interfere with the vision of the engineman on an approaching train to any great extent and the head-light itself is an indication that the train is not clear, so that the approaching train must needs be moving with caution prepared to stop at the switch. Should leading train cover its head-light, the opposing train would approach at a much higher rate of speed, and the flagman from the following train might be much less effectual, than the head-light of leading train in keeping the speed of the approaching train at a safe rate. It is our opinion that when there are more trains

at a meeting point than the siding will hold, the head-light of the leading engine should not be concealed.

Nothing in this requirement is intended to relieve the following train from flagging as required by rule. The following train must protect itself in every case, never depending upon the leading train for protection. All rules remain in effect and the open head-light seems to meet the situation much more fully than a screened head-light on the leading train with the head-light of the second train screened by the caboose of the leading train.

A. R. A. Ruling.

Q. Is it supposed to be understood that yard engines will conceal their head-lights when they are working on tracks in yards adjacent to the main track? I do not find where this question has been discussed and will thank you for any information you can give me on the subject. We have discussed the question several times at our local meetings but are undecided whether head-lights of switch engines in yards should be concealed or not.

Answer. Yard engines under the rules are not required to conceal the head-lights in yards.
—Ruling Sept. 24, 1900.

Rule 18.

196. Q. What signals must yard engines display after sunset?

A. Head-light at front and rear, or two white lights.

197. Q. Do yard engines display markers?

A. No.

197a. Q. Must yard engines display markers when running on main track within yard limits?

A. No.

EXPLANATION.—A yard engine is an engine assigned to yard service and **WORKING WITHIN YARD LIMITS**. If a yard engine, so called because of being used in a yard, should run over the road outside of yard limits, it would become a train and would be required to display markers. Yard engines will not display markers when on main line in yard and signalmen must use good judgment within yard limits when engines pass and also yard men must be careful that the whole of a “pony dose” passes with the engine, or make arrangements to notify signalmen.

Yard engines do not observe all train rules when moving on main track within yard limits as rule 93 releases them from so doing.

A yard engine is not considered a train within the meaning of the rules. A train which is given right over all trains must never consider such order as giving it right over yard engines. In such cases it must be governed by the regulations for such train through yard limits.

A. R. A. RULING.

Q. Our suggestion is that Rule 18 should read as follows: “Yard engines will display a reflecting light to the front and rear by night. When not provided with a reflecting light at the rear, two white lights must be displayed. Yard engines will not display markers.” We think this suggestion is better than to say, ‘Display a head-light to the rear.’ At least this is the way we propose to publish it in our new Book of Rules.

Answer. The term “head-light” as used in rule 18 is simply employed in its technical sense, and is intended to describe a pattern of lamp, and

not the special direction in which the light may be displayed.

Rule 19.

198. Q. What are markers?

A. Green flags by day, and by night a green light to side and front, and red light to rear.

199. Q. Where are markers displayed?

A. At rear of train.

200. Q. What do markers indicate?

A. The rear end of a train.

201. Q. If, while at a meeting or passing point, a train meets or passes you without displaying markers, what would you do?

A. This would indicate that the train had parted. I would signal passing train and remain clear until rear portion passed.

202. Q. When a train is clear of main track what change must be made in the markers?

A. Green lights must be displayed to the front, side and rear.

203. Q. When must the signal be again displayed?

A. When the train is about to return to the main track.

203a. Q. If a train passed with caboose, but no markers displayed, what action should be taken?

A. Such a condition would indicate that more than one caboose was on the train and that the one displaying markers had broken off the train. The passing train should be stopped, or if not, then the dispatcher should be notified.

EXPLANATION. — The rules require every train to display markers for the purpose of indicating the rear end of the train, not alone for the protecting of trains which are met but for following trains as well. A complete train must have markers in every case, otherwise trains

meeting such train must remain for the markers to arrive. When a train is clear of the main track it must display green lights to the front, side and rear end as markers, so that a train moving in the same direction, approaching, will not be stopped by the red signal.

In short markers are used to indicate the rear end of a train, so that opposing train can know that they have met the complete train, also to enable following train to locate the train ahead.

A. R. A. RULING.

Under the rules providing that signals shall be displayed one on each side of the rear of every train as markers to indicate the rear of the train, is it proper or not to display markers on both the caboose and the helper of trains to which helpers are attached to the rear?

Answer.—To answer the question specifically depends upon what the helper is. If the helper is running as an extra train, then both the train which it is assisting as well as the helper must display markers and also class signals. If, however, the helper is without train orders and couples in as a part of the train which it is helping, then the markers must be displayed upon the helper and not upon the caboose of the train which it is assisting. Markers displayed upon the helper and upon the caboose would indicate that there were two independent trains closed up.—Ruling 1908.

Rule 20.

204. Q. When trains are run in sections, what signals must all sections except the last display on the front of the engine?

A. Two green flags and in addition two green lights by night.

205a. Q. How many sections may be run on a schedule?

A. Any number desired.

EXPLANATION.—A section has no authority to use the track ahead of the signals which are displayed on a leading section for it. Any number of trains can be run on the same schedule by displaying signals as required, and each section has the full time-table authority of that schedule.

CRITICISM.—In our opinion Rule 20 should be so worded as to arrange for the last section of a train to carry a distinctive signal, for the reason that accidents have occurred on account of the last section being taken for another train. For example: No. 2 is due to leave terminal at 1:00 a. m. and No. 4 at 2:00 a. m.; No. 1 was given orders to meet second No. 2 at C; it had no orders on the first section and went to D (a blind siding) and got clear for first No. 2, expecting first No. 2 to be on time and that it would have ample time to make C for No. 4. After No. 1 had waited for some time a train passed displaying signals; this was taken for No. 2; shortly after this another train passed without signals, and as No. 4 was then due it was taken for No. 4, and as No. 1 held orders against second No. 2 it proceeded, meeting first No. 2 between stations. Investigation developed the fact that there were two sections on No. 4 and it was 1st and 2nd No. 4 that No. 1 met at D. First No. 2 had become disabled at C and first and second No. 4 had passed it there. Had the rule required the last section to display a distinctive signal there would have been no chance for accident. We recommend that the last section of a train carry a signal half blue and half white, the upper part to be blue and the lower part to be white. Where identification cards are exchanged this precaution is unnecessary. It has been suggested that regular trains carry a schedule ful-

filled signal. We do not think this plan would be of much value unless there was a distinctive signal used on a last section. For example: White could be used as a schedule fulfilled signal where only one train is run on a schedule, and for the last section run on schedule a combination blue and white could be used, this to avoid complications as above.

In case a schedule fulfilled signal is adopted extra trains would not need to display any signal. The first section of a regular train should display green signals as at present. Those who favor a schedule fulfilled signal, argue that it would be a positive indication that all trains of a certain schedule have gone, instead of the negative information conveyed by the absence of a signal. We are inclined to the opinion that if a signal could be observed, that the absence of such signal would be as readily detected.

The object of a distinctive signal carried by the last section of a schedule train as we have suggested, is identification, and there is real need for it on roads that do not use identification cards.

RULE 21.

205. Q. What do two white flags by day, and in addition two white lights by night, carried on the front of an engine, indicate?

A. An extra train.

206. Q. When must the white signal of an extra be removed.

A. When it has reached the end of its run and is clear of the main track.

EXPLANATION.—All extra trains must display the white signals as indicated. These signals are to be placed in the same location on the engine as the green signals, which are used for a following section.

An extra train must head in on the siding

when it reaches the end of its run, as its authority to the main track expires at the entrance switch to the siding at its destination.

RULE 22.

207. Q. When two or more engines are coupled together and carrying signals, should each engine display the signals?

A. No; only the leading engine.

208. Q. When two or more engines are coupled together and running backward as a section of a train carrying signals for a following section, which engine will display markers and which engine classification signals?

A. The leading engine must display classification signals in the place provided for them, near the headlight; the rear engine will display markers in the place provided for them, on the pilot.

EXPLANATION.—When two or more engines are coupled together the leading engineman should sound the signals and operate the air. The leading engine, in case of an extra, gives its number to the extra, and orders addressed to this train should be addressed to the leading engine, because the train is identified by this engine. Each engineman must, however, have copies of all clearances and train orders.

Should the leading engine be detached so that its connection with the train might not be understood, proper precaution must be taken to prevent any misunderstanding by opposing trains. Whenever the leading engine is discontinued the signals must be transferred to the remaining engine immediately.

A. R. A. RULING.

Question. Referring to rule in the Standard Code which provides that when two or more en-

gines are coupled, the leading engine only shall display the signals, except on grades where helping engine becomes the leading engine, where signals will also be displayed on the helping engine. This raises the question if the leading engine displays signals and does not display a rear end, would it not come under the head of a parted train, as the second engine would display signals and also rear end? On the other hand, if the helping engine displays signals and a rear end, we have two sections on the one schedule, while the time orders, etc., would perhaps indicate a first and second section as the case may be; or, further, there might be three sections on the train, which would lead to a misunderstanding on the part of the trainmen, they figuring that the helping engine was one section, the train which it was helping the second, etc.

Answer. The Committee on Train Rules does not attempt to answer questions based upon a modification or departure from the Standard Code rules. The question is apparently occasioned by some modification of Rules 21 and 22, and the Committee on Train Rules suggests a strict adherence to the Standard Code forms, which are fully ample and sufficient to cover such a situation as presented by this question, with its corresponding difficulties.

Rule 23.

209. Q. If an extra train passes with only one white flag displayed, how will it be regarded?

A. The same as if two were displayed.

210. Q. If a section passes with only one green signal on engine, how will it be regarded?

A. The same as if two were displayed.

211. Q. Is the proper display of signals required?

A. Yes.

EXPLANATION.—Train signals include classification signals, markers and indicators. All signals should be removed as soon as the purpose for which they were displayed is accomplished.

It sometimes happens that one flag, which is being displayed, will lose off the engine; or one light may go out, and in either case it is desired that the regular indication will be understood by other trains—classification signals are duplicated so they can be easily seen from either side of the train.

Rule 24.

212. Q. When cars are being pushed by engine at night, what must be displayed on the front of the leading car?

A. A white light.

213. Q. Any exception to this?

A. Yes; when shifting or making up trains in yards it need not be done.

EXPLANATION.—When pushing cars at night a white light must be displayed on the leading car and a flagman should be in position to signal the engineer in case of need.

Rule 25.

214. Q. Must each car on a passenger train be in communication with the engine?

A. Yes.

215. Q. What appliance is used for this purpose?

A. Air whistle signal, or gong or cord.

EXPLANATION.—A communicating signal is required between each coach and the engine in a passenger train so that in case of need the engineer can be communicated with. This communication need only be such signals as are necessary from time to time for the proper and safe handling of the train.

Rule 26.

216. Q. What does a blue signal displayed at one or both ends of a car, engine or train indicate?

A. That workmen are under or about the car.

217. Q. May cars be placed in front of such train, engine or car in such a position as to obstruct the view of the signal?

A. Yes, but the workmen must first be notified.

218. Q. When a blue signal has been placed, who may remove it?

A. Only the workman who placed it.

EXPLANATION.—When a car, engine or train is protected by a blue signal, such car, engine or train must not under any circumstances be moved or coupled to. If it becomes necessary to move a car, engine or train thus protected, the workman placing the signal must first be notified and remove the signal before it can be done. This is necessary so that the workman may arrange for protection.

A. R. A. RULING.

Question. A question has been asked in regard to Rule 38 (present Rule 26), as to whether or not it is intended to cover the case where a fireman or some one else is underneath an engine, cleaning out the ashpan, etc.

Answer. The committee would state that the rule is only intended to protect car inspectors at work under or about the car or train, and, while admitting the force of the suggestion to protect the fireman or other persons under the engine cleaning out the ashpan, etc., the committee finds so many other cases where it is dangerous to move the car or train that it will be impossible to modify the rule to cover all the cases, and thinks it is a

proper matter for each superintendent to formulate special rules to cover the particular exigencies on his division.

Question. Referring to Rule 26, which reads as follows: "A blue flag by day and a blue light by night, displayed at one or both ends of an engine, car or train, indicates that workmen are under or about it; when thus protected it must not be coupled to or moved. Workmen will display the blue signals and the same workmen are alone authorized to remove them. Other cars must not be placed on the same track so as to intercept the view of the green signals, without first notifying the workmen."

I would be glad if you will submit to the committee on transportation the following for their consideration in lieu thereof:

26. "A blue flag by day and a blue light by night, displayed at one or both ends of an engine, car or train, indicates that workmen are under or about it; when thus protected it must not be coupled to or moved. All workmen and other employees must protect themselves while at work by displaying the blue signal, and the same workmen are alone authorized to remove signals. Other cars must not be placed on the same track so as to intercept the view of the blue signals, without first notifying the workmen."

We have had considerable trouble with the present form of rule, and it has been suggested by our counsel that Rule 26 be changed substantially as recommended above, for our protection.

Answer: In framing Rule 26, the committee thought it impracticable to require the display of blue signals by other than workmen. The committee feels that the object to be attained by the blue signal is now complete in rule 26.

Rule 27.

245. Q. How should a signal improperly displayed be regarded?

A. As a stop signal.

246. Q. How should the absence of a signal, where one is usually shown, be regarded?

A. As a stop signal.

247. Q. What action must be taken in such cases?

A. The fact must be reported to the superintendent.

EXPLANATION.—An imperfect signal or the absence of a signal where one is usually shown must be regarded as a stop signal in order to secure safe operation of trains, for the reason that signals sometimes get out of adjustment or become broken so that their indication would be imperfect. Also at night a lens might become broken or a light go out, causing either an imperfect display or none at all. In either case the signal must be regarded as giving a stop signal to insure safe operation of trains.

Rule 27 refers to all fixed signals, which includes switch lights.

Rule 28.

251. Q. What is green and white used for?

A. To stop a train at a flag station.

252. Q. May green and white be used to stop a train at a point that is not a flag stop for that train?

A. No; a red signal must be used.

EXPLANATION.—When a green and white signal is displayed to stop a train it should be acknowledged by two short blasts of the whistle.

Flag station stops are indicated on the schedule of a train by the letter "f" as a prefix to the time at the station where it is desired that

the train stop on flag. If it is desired that the train stop at that station for any other purpose a red signal, or the regular train order signal, must be used.

RULING.—Rule 28 was questioned as to the advisability of adopting it for local freight trains and also in regard to giving the signal required at flag stations to passenger trains which are scheduled to stop on flag. The point being that at stations where no night man was kept the passengers could not be expected to know the use of the signals if left there, and besides, to leave such signals would tempt small boys and tramps, etc.

Answer. The committee decided that special arrangements should be made to cover such detailed cases as those in point.—April 18, 1890.

Rule 29.

253. Q. When a signal (except a fixed signal) is given to a train to stop, how must it be acknowledged?

A. By two short blasts of the whistle, except that when signal 16d is given to stop at next station, it must be answered by three short blasts of the whistle.

EXPLANATION.—A signal given to a train to stop must be answered by two short blasts of the whistle, except that when a signal is given to stop at the next station it will be answered by three short blasts of the whistle. Two short blasts were formerly given in answer to a “stop at next station” signal, but owing to the fact that a flagman might be trying to stop the train at the time the signal was given the answer might be confused and the flagman take the two blasts as an answer to his signal, which might therefore result in accident. Fixed signals are not answered.

Rules 30 and 31.

254. Q. When is the engine bell required to be rung?

A. When the engine is about to move and approaching every public road crossing at grade.

255. Q. When must whistle be sounded?

A. At all whistling posts.

EXPLANATION.—An exception must be made to the above where the use of the whistle is prohibited by law.

Rule 32.

256. Q. Is the unnecessary use of the whistle and bell prohibited?

EXPLANATION.—The bell and whistle must only be used as directed by rule and not then if prohibited by law, except to prevent accident.

Rule 33.

257. Q. When will watchman at public road and street crossing use red signals?

A. Only to stop trains.

Rule 71.

300. Q. How is one train superior to another?

A. By right, class or direction.

301. Q. How is right conferred?

A. By train order.

302. Q. How is class and direction conferred?

A. By time-table.

303. Q. Which is superior, right, class or direction?

A. Right is superior to class or direction and direction is superior as between trains of the same class.

EXPLANATION.—When a train is superior

by "right" it is because it holds orders which make it superior, but when it is superior by class or direction it is superior because it is moving on a schedule, which gives it such superiority. The word "right" means train order. The superior direction is determined by a footnote on the time-table, which states in which direction trains are superior.

Rule 72.

304. Q. State the relative superiority of trains of each class.

A. Trains of the first class are superior to trains of the second class, and all successive classes; trains of the second class are superior to third class, and all successive classes, and so on, and trains in the direction specified in the time-table are superior to the trains of the same class in the opposite direction.

305. Q. In which direction on this division are trains superior to trains of the same class in the opposite direction?

A.

EXPLANATION.—When Rule 72 was adopted it was suggested that it would make a great many additional train orders, and it was also thought that the rule would delay trains somewhat more than the 30 minute rule which was formerly in effect. With this in mind the A. R. A. committee added a note to the rule as follows: "Note.—It being represented to the committee that some of the roads represented in the convention will be unable, on account of limited telegraph facilities, and other local causes, to carry out this rule in its literal meaning and full scope, it is suggested by the committee that such roads may issue regulations to arrange this matter in some other way. The committee believes, however, that a test of the rule and its literal enforcement will re-

sult to the entire satisfaction of those using it." In 1890 the committee made reply to a critic of the rule to the effect that, "In regard to the criticism of Rule 72, the committee refer to the note on same (Note given above) with the further information that the experience of a large number of roads that have recently adopted Rule 72, as formulated, has demonstrated the fact that the operation of trains has been facilitated and the delays have been much less than under the 30 minute rule referred to."

The different classes are designated as 1st, 2nd, 3rd and 4th class. Usually the 1st class is for through passenger trains and the 2nd class for local passenger trains, the 3rd class for through freight and the 4th class for local freight trains.

Rule 73.

306. Q. Are extra trains inferior to regular trains.?

A. Yes.

EXPLANATION.—There is no superiority between extra trains except that the extra train moving in the direction on which the time-table confers superiority will hold the main track at a meeting point with an opposing extra.

MOVEMENT OF TRAINS

NOTE.—Schedule trains should register on the page which corresponds with the date the train is due to arrive or leave such station, no matter how late it may be. Extra trains register on the page corresponding with the date they actually arrive.

Rule 82.

400. Q. When do regular trains lose both right and class?

A. When they become twelve (12) hours late.

401. Q. No. 10 is due to arrive at C at 10:30 a. m., and leave at 11:30 a. m.; when has it lost both right and class?

A. If it fails to arrive at C before 10:30 p. m., or to leave C before 11:30 p. m.

402. Q. May No. 10 flag into C at 10:40 p. m. and leave as No. 10 if it can get out before 11:30 p. m.?

A. No.

403. Q. Could it leave as No. 10 before 11:30 p. m. if dispatcher authorizes it by train order?

A. Yes.

404. Q. If an opposing train held an order to meet No. 10 at a station and No. 10 became twelve hours late at such station, may the opposing train proceed against No. 10?

A. Yes.

EXPLANATION.—When trains are running in sections any section which becomes twelve

hours late on the schedule loses both right and class, no allowance being made for sections keeping five minutes apart. A train holding an order to run late loses both right and class when it is twelve hours behind its schedule time. The run late order does not lengthen the life of the train at all. Rule 82 refers to the schedule time as shown upon the time-table in every case.

Formerly schedules were good until used or annulled, and in case of accident it was not unusual for a train to be two or three days late. This sort of thing made it exceedingly difficult to check a register and be sure that all trains had arrived, because it was necessary to go back two and three days. The adoption of the twelve hour limit has made the checking of a register a comparatively simple operation.

A.R. A. RULING.

Question. Under Rule 82. A train scheduled to arrive at B at, say, 10:00 a. m., leave B at 10:30 a. m., and to arrive at C at 11:00 a. m., fails to reach B before 10:00 p. m., and flags itself to B. Has it a right under the rules to proceed to C, provided it can leave B before 10:30 p. m. and arrive at C at or before 11:00 p. m.?

Answer. No; unless authorized by train order.—Ruling Sept. 24, 1900.

Question. Will you please advise me if a train arriving at a point where, say, one hour dead time is shown, 11 hours and 55 minutes late on its schedule arriving time, can leave any time within twelve hours of its leaving time?

Answer. Yes. A train arriving at a station less than twelve hours late on its schedule arriving time, does not lose its right. It has fulfilled that part of its schedule; after which, the leaving time only at that station need be taken into consideration, and if such train can depart

within any time less than twelve hours late on its leaving time, it has, under Rule 82, the right to proceed. Should a train at any point fail to make its schedule within the twelve hour limit, it cannot thereafter resume its schedule without train order, even though it overtakes it.

Question. Under Rule 82 and 91. Does the second section of a train running from A to D, the schedule showing arriving time at D at, say, 11:30 a. m., lose rights at D at 11:30 or 11:35 p. m.?

Answer. At 11:30 p. m.

Rule 83.

405. Q. What must be ascertained before leaving a junction, terminal or other starting point, or before passing from double to single track?

A. That all trains due, which are superior or of the same class, have arrived or left.

EXPLANATION.—Unless otherwise specified, it is the duty of the conductor to examine the register or otherwise ascertain that all overdue trains of the same or superior class have arrived or left, and he must impart this information to the engineman.

Rule 83 refers to trains of the same class even though such trains are moving in the inferior direction, this for the reason that the train of superior direction must approach all sidings prepared to stop until such train is met, as per Rule 90.

On roads which have train registers this information is obtained from the register. Where there is no register, their information is generally obtained from the train dispatcher.

Bulletin boards are usually provided at designated stations, and all train and yard conductors and enginemen must consult such boards be-

bore starting out on a trip, or beginning the day's work.

Rule 84.

406. Q. May a train start without a proper signal?

A. No.

EXPLANATION.—Suppose an engine broke down on the road, and another engine, which was headed wrong, was put on the train. After the engine is on the train the proper signal to give is the "proceed" signal, as the train is to proceed on its schedule. The signal in this case being given for the movement of the train as a whole, not for the movement of the engine as is the case when an engine is doing switching. Should the engine of No. 93 cut off to do switching, then the signal must be given to the engine with respect to the way the engine is headed, but when the engine is attached to train 93 it becomes a part of that train and the regular proceed signal indicates a forward movement of the train as a whole.

Likewise all fixed signals, switchmen and signalmen will give signals to a train with engine headed wrong the same as if the engine was headed right. This is absolutely necessary to a uniform practice. Otherwise the back-up signal of the train crew would have to be interpreted the same as the proceed signal given by switchmen, signalmen and fixed signals along the line.

Rule 84 refers to a signal from the proper person as well as one given in the proper manner. At some initial stations the station master or yard master has the authority to start trains, but at other points the conductor is the proper man to give the proceed signal.

Rule 85.

407. Q. May a train proceed ahead of a train of the same class in the same direction?

A. Yes.

408. Q. May an extra train pass another extra or a train of one class pass a train of the same class?

A. Yes.

408a. Q. No. 3 and No. 1 are trains of the same class and No. 3 is scheduled to pass No. 1 at C. In case No. 1 or No. 3 is late will it effect this passing point?

A. No. No. 1 will proceed to C and there wait for No. 3 to pass.

408b. Q. In case it is desired that No. 1 should go farther ahead of No. 3 what form of order should be used?

A. An order should be given reading: "No. 3 pass No. 1 at ——" (Form B. example 1).

EXPLANATION.—When a train of one schedule becomes late and is on the time of a train of another schedule of the same class in the same direction it may proceed without train orders ahead of the other train on whose time it has fallen back on. One train may pass another of the same class and different schedule without orders. Extras may pass and run ahead of other extras without orders.

In regard to passing stations for trains of the same class, it is the author's opinion that a time order is not a proper order to advance a train of the same class running in the same direction beyond a time-table passing point, for the reason that the train to be passed is proceeding to a fixed passing point and is not required to clear the time of the following train. Both trains may be an hour late, it matters not, they proceed to the passing point.

The note under Form E says the order makes the time of the train named as much later as stated in the order, and trains receiving it are required to run with respect to this later time as be-

fore required to run with respect to the regular schedule time. We do not see as this gives a train any right to disregard this fixed passing point, since the train to be passed is not respecting the time of the other train, but simply obeying their own schedule indication. When desired to advance the train the order should read: "No. 3 pass No. 1 at D," or at whatever point is desired.

Rule 86.

409. Q. How must an inferior train clear the time of a superior train in the same direction?

A. Not less than five minutes.

410. Q. How must an inferior train clear a first-class train in the same direction?

A. It must be clear at the time a first-class train is due to leave the next station in the rear, where time is shown.

EXPLANATION.—An inferior train must clear the time of a superior train in the same direction, not less than five minutes but it must be clear of a first-class train in the same direction at the time the first-class train is due to leave the next station in the rear where time is shown.

Rule 87.

411. Q. What is required of an inferior train with respect to opposing superior trains?

A. It must keep out of the way.

412. Q. How must a train failing to clear the main track as required by rule be protected?

A. By flag as per Rule 99.

413. Q. How much must extras clear the time of regular trains?

A. — minutes.

414. Q. How will extras be governed with respect to opposing extras?

A. By train orders.

EXPLANATION.—An inferior train must clear the time of a superior train as required by rule, and if for any reason it is unable to do so it must be protected as per rule 99. The above is the cardinal point in the safety of train movement and must be obeyed in all cases.

Rule 88.

415. Q. At meeting points between trains of the same class when must the inferior train clear the main track?

A. Before the leaving time of the superior train.

415a. Q. Which end of the siding should a train enter?

A. It should enter the end of the siding which will permit it to head in.

416. Q. If necessary to back in to clear the main track what must be done?

A. Flagman must be sent out as per rule 99, unless otherwise provided for.

417. Q. At meeting points between extra trains which extra takes the siding?

A. The extra in the inferior time-table direction.

EXPLANATION.—It was the sense of the convention, when rule 88 was adopted, that at a meeting point should the inferior train have to back in for any reason it must first stop the superior train before passing the switch where the inferior train enters. Should the back-in provision be covered by train order or special instruction it would not be necessary to stop the superior train before backing in, but the flagman should be sent out as per rule 99 before the inferior train passes the switch.

A train should not lay on the siding for another train an unreasonable length of time, but should get in communication with the telegraph

office to see if there is a possibility of getting farther.

A train holding main track at the meeting or passing point should adjust the switch for the other train.

In case an order is given for No. 2 to meet extra 101 west at C. Suppose that C is a spur track with switch in the direction from which No. 2 was approaching. In such a case it is the duty of the extra to send a flagman out in the direction of No. 2 a sufficient distance to secure protection before passing the switch to back in. The fact that it is necessary for the extra to back in at that point in order to meet No. 2 is not sufficient authority to permit the extra to pass the switch without first sending out a flagman as per rule 99, because the rights of both trains under a Form A order extend only to the switch where the inferior train enters the siding, therefore when it is necessary for the inferior train to go beyond that point to back in the movement must be fully protected.

RULING.—Question. May an inferior train pass the switch to back in without first flagging the superior train?

Answer. The reply of the committee was in the negative.—1893.

Rule 89.

418. Q. At meeting points between trains of different classes when must the inferior train clear?

A. The inferior train must take siding and clear the time of the superior train at least five minutes.

419. Q. If necessary for the inferior train to back in what must be done?

A. Flagman must be sent out as per rule 99.

420. Q. How much must an inferior train clear the time of a superior train?

A. Five minutes.

EXPLANATION.—The same explanation as given for rule 88 applies to rule 89. In making time-tables the schedule time should allow for a clearance of five minutes for inferior trains. That is, if a superior train is due at a meeting station at 2 p. m., the inferior train should be scheduled to arrive at 1:55 p. m.

The condition of trains with respect to a clearance under the rules is this: Trains of the same class are only required to clear the time of the train of superior direction. Trains of inferior class are required to clear the time of a train of the superior class in the opposite direction five minutes. The reason for this arrangement is that it is impracticable to require a superior class train, say, for example, a passenger train, to keep in touch with the probable meeting points with all inferior class trains, therefore inferior class trains are required to clear the main track five minutes before the leaving time of the superior class train. This five minutes gives the inferior class train time enough to get a flagman out as required by the rules in case it has trouble in getting clear and finds itself in a position where it will fail to clear the superior train the required number of minutes. This flagman is to protect the superior train, which, under the rules, is not required to know that the inferior train is liable to be at that point. That is, between trains of different classes the burden of protection rests with the inferior train, whereas when trains are of the same class the superior train takes a share of the responsibility. The requirement that a train must clear the main track five minutes before the superior train is due is not necessary in the case of trains of the same class because

in such cases the rules require that the superior train must stop at schedule meeting stations, if the train to be met is of the same class, unless the switch is right and the track is clear, and when the expected train of the same class is not found at the schedule meeting station, the superior train must approach all sidings prepared to stop, until the expected train is met. Under such circumstances trains must stop clear of the switch used by the train to be met in going on the siding.

Under the rules, if both trains are of the same class, both trains are required to protect at the meeting point; the inferior train with a flagman if it fails to clear as required and the superior train by approaching under control prepared to stop if the switch is not right and the main track clear. But if the trains are of different classes, then the burden of protection rests with the inferior class train; the superior class train approaching at full speed until it is warned by the flagman; the idea being that the five minutes clearance will be sufficient to permit the flagman to protect the inferior train if it becomes necessary.

A. R. A. RULING.

Rules 92 and 89.

Question. Will you kindly enlighten us as to the proper interpretation of Rules 89 and 92.

Answer. The answer is to be found in Rule 5 of the Standard Code of train rules, reading as follows: Rule 5. Not more than two times are given for a train at any station; where one is given it is, unless otherwise indicated, the leaving time; where two, they are the arriving and leaving time.—Ruling 1908.

Rule 90.

421. Q. When are trains of the same class required to stop at schedule meeting or passing stations?

A. Unless they can plainly see that the switches are right and track clear.

422. Q. At what point should the train be stopped?

A. Clear of the switch that the train to be met or passed uses in going on the siding.

423. Q. In case the train that should be met or passed is not at the schedule meeting or passing point, how should a train having the right of track be governed?

A. Proceed, and approach all sidings prepared to stop, until the expected train is met or passed.

EXPLANATION.—See explanation to Rule 89 as it also applies to Rule 90. The requirement that trains must stop at schedule meeting stations if the train to be met is not clear is necessary because of the fact that no provision is made in the Standard Code for a variation of watches, and also because no clearance time is allowed.

A. R. R. DECISION.

Will you please submit to the Committee on Train Rules the advisability of changing Rule 90 so as to strike out of the rule the words "of the same class." I enclose you S. F. & W. Rule 227, which requires that no train must pass a meeting point at a greater rate of speed than eight miles per hour.

What occurs to me is that all the rules with respect to the different class trains meeting were intended to bear upon the point of having the switches in proper position, and in event they

were not in proper position the moving train would be under control.

If there is no modification of the rule by erasing the words "of the same class," then it occurs to me that passenger trains can run by inferior class trains at as high rate of speed as they choose, disregarding Standard Rule 87. There are instances where Standard Rule 87 cannot be carried out under certain conditions, such as short side tracks, etc.

Answer. The judgment of the committee was that the rule, as approved by the convention, is correct and according to the best practice. The committee believes that as few restrictions and exceptions as possible should be interposed in the way of permitting trains to make time, as, for example, that trains delayed at stations should protect themselves, rather than continue the old practice of compelling all trains to feel their way into stations, expecting to find trains occupying the main track without proper protection.

The precaution required by Rule 90 is thought to be necessary only for cases in which there is no time clearance required.—Oct., 1889.

Rule 91.

424.Q. Unless some form of block signal is used how far apart must trains in the same direction keep?

A. At least five minutes except in closing up at stations.

EXPLANATION.—By closing up at stations is meant that in case two or more trains are going to a station to meet an opposing train, the five minute rule need not be observed, providing that due caution is used. This is to arrange a more flexible method of handling trains when following each other closely at stations.

Rule 92.

427. Q. May a train arrive at a station in advance of its schedule arriving time, when shown?

A. No.

428. Q. May a train leave a station in advance of its schedule time?

A. No.

428a. Q. When only one time is shown at a station, what is it, unless otherwise indicated?

A. The leaving time.

EXPLANATION.—When only one time is shown at a station for a train it is, unless otherwise indicated, the leaving time, and a train may arrive at such station as much ahead of this time as it can, for such time only governs the departure. When the arriving time is shown a train must not arrive ahead of that time.

A train should not leave a station in advance of its schedule time for it is one of the cardinal principles of the rules that a train has no authority to existence until its schedule time has arrived therefore, no train should be run ahead of its schedule time even by virtue of train orders.

RULING. Q. Referring to Rule 92, second clause. A train must not leave a station in advance of its schedule leaving time. In the consideration of this rule by the Committee on Train Rules, kindly advise if it was understood that a train would have the right to go to a station in advance of schedule leaving time or in advance of time shown in timetable when it was understood that such time was leaving time. Under this rule it is possible for a freight train to leave a station on time at schedule leaving time and reach the next station in advance of schedule leaving time. Some of our division superintendents want to make the rule that where only one

time is shown at a station that it should be both arriving and leaving time, in order to prevent train from coming to station ahead of schedule leaving time.

A. Unless the arriving time is shown there is nothing in the Standard Code to restrict a train from arriving at a station ahead of its leaving time.—Ruling Sept. 24, 1900.

Q. Under the Standard Code of Train Rules, can a light engine running as 1st section of regular train No. 2 (a mixed train) be given an order by the dispatcher to run ahead of time?

A. The Standard Code does not provide for the running of a regular train ahead of time. In the opinion of the committee, the practice should not be permitted.—Ruling 1905.

Q. It has been suggested to me that Rule 92, of the Code, is incomplete without the addition of an explanatory clause, such as follows: "Under this Rule it will be understood that where the inferior train is shown to arrive on the leaving time of the superior train, or where a train is shown to arrive on the leaving time of a train of the same class, the inferior train has the right to arrive five minutes before the time shown."

I should be glad to have the benefit of the expression of the opinion of the Committee on Train Rules on this matter.

A. Where the arriving time of a train is the same as the leaving time of an opposing superior train, the inferior train has not the right to arrive before the arriving time shown. (See Rule 92). The arriving time, when shown, should provide for the clearance required by the rules.—Ruling March 11, 1903.

Rule 93.

429a. Q. What rights have trains within yard limits?

A. The main track may be used keeping clear of ——— class trains.

430. Q. How must ——— class and extra trains move within yard limits?

A. Prepared to stop unless the main track is seen or known to be clear.

EXPLANATION.—This rule provides for the movement of all trains through the yard limits. In case an extra train receives an order giving it right over all trains, it does not entitle the extra to disregard Rule 93 with respect to extra trains, and it must move through the yard limits prepared to stop, unless main track is seen or known to be clear. This is for the reason that right over all trains does not include yard engines, as a yard engine is not a train, within the meaning of the rule.

RULING. Q. Where yard limits are defined by yard limit boards, does it authorize yard engine, or in fact any train within those limits, to occupy main lines on the time of same or superior class trains without protection. For example: Extra arrives at station where yards limits are defined by yard limit boards. Can it proceed with its work in yard limits without protection on the time of regular trains?

A. No.—Ruling Sept. 24, 1900.

Q. The interpretation of the definition of "yard" as set forth in the Standard Rules, and the matter of proper regulations concerning movements within defined yard limits are questions now being fiercely discussed and agitated on railroad lines of this vicinity.

It is contended that the definition of "yard" provides, broadly speaking, that the Time-Table, Rules Governing Movement of Trains and Rules for Movement by Train Orders have no jurisdiction or authority in yards. In other words, a yard is a fenced-up baseball park, and all movements made within the same by trains, yard-engines, light engines, etc., shall be made subject to the regulations governing this particular yard, and that the Time-Table, Rules Governing Movement of Trains, and Rules for Movement of Trains by Train Orders shall absolutely cease the instant a train arrives at the "baseball park" fence—or rather, the "main line" ceases at this point.

On the other hand, it is contended that the Time-Table, Rules for Movement of Trains and Rules for Movement by Train Orders govern in yards as well as at other stations, except to the extent that they might be modified, restricted, superceded or annulled by special instruction relating to all or individual yards.

The circumstances in question are as follows: Our special instructions governing Movements in Yards provide that all trains, yard engines, etc., must proceed under control within yards.

Another special instruction defines "Under Control" as being able to stop within the distance the track is seen to be clear. Under these instructions yardmen maintain they have as much right within this Mystic Circle as a passenger train or any other train or engine, and without flag protection, etc., notwithstanding the Rules for Movement of Trains provide that inferior trains, etc., shall clear the time of superior trains, etc.

The yard crew also object to being referred to as a "train" in any shape, manner or form, and

give this as another reason why Rules for Movement of Trains and for Movements by Train Orders are not applicable to yard engines—and for no other reason than that a yard engine is not a train. The crew state, however, that they expect to keep out of the way of all important trains as much as possible, and endeavor to give them a clear track at all times, avoiding delay, etc., on the other hand, they expect all these trains to be under control, thus avoiding the necessity of flag protection on the part of yard crews, and also as a matter of protection to the trains themselves in case they should find their progress obstructed by switch engines, cars or otherwise in yards.

Another question is put up about as follows: The Time-Table, Rules for Movement of Trains, and Rules for Movement by Train Orders have authority in any yard, and in this particular yard we find the customary regulation, providing that all trains shall proceed under control within the same, etc. Now, we will assume that this yard is located in Buffalo, and we find a special train running from Chicago to New York, through Buffalo, and with it a train order giving right over all trains.

Does this order give it right to proceed through Buffalo yard regardless of other trains, yard engines, etc.? If so, then it necessarily follows that the train dispatcher must receive an acknowledgement from all yard engines, etc., at Buffalo, before he can permit the special train to pass through that place.

Of course you understand I am referring to single track yards because we have practically no double track. Personally, I am decidedly of the opinion that a "yard" should be operated entirely independent of the "Main Track," and there

should be rules for this independent operation in the same manner that we have independent rules for operating double track, block signals, etc. I am also of the opinion that under the definition "Yard" it is intended that the Time-Table, Rules for Movement of Trains, and Rules for Movement by Train Orders should not govern, and that each railroad company is to provide its own regulations for movements within yards. However, it is not exactly plain in this respect, and on this account there is much room for much good argument pro and con.

Of course you understand in this country it is not always possible to lay out yards to the best advantage in the way of obscured views, etc.

On the other hand, nearly all our yards contain many curves, and view is often obstructed by rock bluffs, mountain sides, etc.

Will you kindly set us right in the premises?

A. The Standard Code definition of a yard is:

"Yard. A system of tracks within defined limits provided for the making up of trains, storing of cars and other purposes, over which movements not authorized by time-table, or by train orders, may be made, subject to prescribed signals and regulations."

Nothing in this definition contemplates the abrogation of the authority of trains to move on the main track.

Special instructions authorized by or in force on any railroad are matters of detail for that railroad, and are not intended to be covered by Standard Code Rules. The difficulty here appears to be caused by incomplete special instructions governing movements in yards. The definition for a yard being interpreted to include a main track—

A yard engine is not a train within the meaning of the Standard Code, it having no authority

to move upon a main track unless specially authorized.

The hypothetical case of a special train running from Chicago to New York passing through Buffalo yard and holding a train order giving it right over all trains, can best be answered by quoting a new rule which the committee on train rules has recommended to the Association for adoption as follows:

"93. Within yard limits the main track may be used, protecting against ——— class trains, ——— class and extra trains must move within yard limits prepared to stop unless the main track is seen or known to be clear."

With this rule in force there can be no question about the movement of a special train through Buffalo yard.

The adoption of new Rule 93, in connection with definition of a yard will answer the various questions and clear the situation.—Ruling March 21, 1906.

Q. Under Rule 93, with the cost of operation high and delays to switching service expensive, in mind, kindly give us your views as to the proper interpretation of Rule 93. Would the word, "protecting," mentioned in the rule imply that switch engines working within yard limits must be protected against the designated class trains and inferior trains in accordance with Rule 99?

A. The Committee on Train Rules does not attempt to give in detail the manner in which protection is to be secured, conditions and practices varying on different roads. Railroads equipped with automatic block signals may wish to take advantage thereof; some roads operate under manual block protection; other roads equip themselves with semaphores on each side of the yard, which are held at stop at all times except when trains are to be allowed to pass or come in;

some roads have rules requiring all second class and inferior trains to approach and pass through yards under control. The manner in which protection may be given is left to each road to determine itself.

Q. A great many lines, in their instructions governing the movements of trains in yard limits, state that trains must be under full control. We would like to ask you if you have any knowledge of any authoritative definition of "full control?" Proceed with caution seems to be more or less synonymous with full control, and perhaps there may be some kind of a definition as to what it means to "proceed with caution."

A. The term "full control" does not appear in the Standard Code. The term "proceed with caution" is employed and the manner or method is left for each road to determine for itself in accordance with its needs and the varying conditions and practices necessary on different railroads.

CRITICISM. In our opinion the blanks in Rule 93 should have been filled in by the committee who framed the rules, as it leaves the intention of the rule to be assumed by each road using it, with the result that not all roads understand it alike.

Some roads make the rule read, "Within yard limits the main track may be used, protecting against first class trains. Second and inferior class and extra trains must move, etc." Under such an interpretation no authority is given to use the main track within yard limits upon the time of second and inferior class and extra trains, and no instruction is given to first class trains to look out for yard engines or trains within yard limits although the rule clearly gives permission for yard engines and trains to use the main track within yard limits on the time of first class trains.

Other roads make the rule read, "Within yard

limits the main track may be used, protecting against second and inferior class trains. Second and inferior class and extra trains must move within yard limits prepared to stop, etc." In our opinion this is the only logical and safe method of filling in the rule. In this manner the rule clearly defines the action of all concerned. First class trains may go through the yard at full speed and all other trains must move prepared to stop, and in turn yard engines or trains cannot work on the time of first class trains, but can work on the time of all other trains by protecting.

Q. Referring to Standard Rule 93 we would be glad to know if the committee has considered the advisability of adding another paragraph or a foot-note to this rule, whereby leading trains will be held equally responsible for rear-end collisions in the yards?

A. The leading train must protect itself against ——— class trains, as provided by rule, but if the leading train is followed by ——— class or extra trains which are required by rule to "move within yard limits prepared to stop," the responsibility is clearly defined, therefore the committee does not consider an additional paragraph necessary.—April 18, 1911.

Rule 94.

431. Q. In case you overtake a train disabled so that it cannot move, how would you proceed?

A. If necessary, take the orders and assume the schedule of the disabled train to the next open telegraph office and report to the superintendent.

432. Q. When a disabled train is passed by a following train to which it has given its orders and authority, on what right and schedule will the disabled train move?

A. On the rights and schedule of the train with which it exchanged orders.

432a. Q. When a disabled train is overtaken is it necessary to exchange schedules and orders if the overtaking train holds a schedule or orders which permit it to proceed?

A. No.

433. Q. If an inferior train or a train of the same class having right or schedule to proceed overtakes a train between telegraph stations unable to proceed against the right of schedule of an opposing train, how will they be governed?

A. The delayed train after proper consultation with the following train will precede it to the next telegraph station where it will report to _____

434. Q. When an opposing train is met under these circumstances, what must be done?

A. The leading train must fully explain to it that the expected train is following.

434a. Q. If the overtaking train has not right or schedule of its own which permits it to proceed may it pool its rights with the delayed train and both trains proceed on such combined authority?

A. No, the overtaking train must hold right or schedule of its own which permits it to proceed before it can either proceed itself or take the delayed train.

434b. Q. Will this rule apply if the delayed train is overtaken on the main track between stations?

A. Yes.

434c. Q. Will it apply if a delayed train is overtaken at a siding which is not in communication with the train dispatcher?

A. Yes.

EXPLANATION.—It is not necessary in passing a disabled train to assume its schedule

and take its train orders if the train which is to pass has right of its own to make the next telegraph office. It may be that the disabled train has been delayed so long that it has no right to proceed, in which case should the following train have no right, both trains are tied up and no exchange of orders and schedules would be of avail. Whenever schedules are exchanged all orders must also be exchanged complete.

Extra trains may exchange rights under this rule.

It is not necessary for trains No. 2 and No. 50 to exchange orders if No. 50, the train which overtakes No. 2 which is disabled, has an order which will take it to the next office. In such a case rule 94 is authority for No. 50 to pass No. 2, the superior train, and proceed ahead of it to the next open office where it must report to the train dispatcher. In the case mentioned No. 50 would not take No. 2's orders or numbers as it would not help No. 50 to do so.

The intent of the rule is, suppose the disabled train holds an order to meet an opposing train at the next station and the train which overtakes it has an order to meet the same train at the blind siding where the disabled train is overtaken; in such a case it would be necessary to change numbers and orders, otherwise both trains would be tied up. The exchange of numbers and orders is not for the purpose of allowing the following train to pass the disabled train, the rule gives that permission regardless of the class of the disabled train, but the exchange is made to help the train which is not disabled out of the blind siding for an opposing train—if necessary.

The second paragraph is not as easily explained for the reason that it is not in full harmony with the balance of the Standard Code principles of operation. The second paragraph of

the rule works well when sections are not involved, but when they are, there are certain cases when the rule needs a special interpretation which is not furnished by its wording. It is possible to operate the rule between sections of the same schedule when the leading section is only restricted by schedule, but when the leading section is restricted by right the rule is positively dangerous.

When it is used between any trains, trainmen must be sure that the train which overtakes the other has right or schedule of itself, without pooling schedules or orders with the leading train, which permit it to proceed. For if trains were allowed to pool orders and schedules, two opposing trains might do the same with disastrous result. In fact such a thing has happened under the rule.

No. 58 is an eastbound train which is moving in the superior direction, No. 57 is a westbound train of the same class but of inferior direction; 1st No. 57 makes D, which is a blind siding, for No. 58, where it is overtaken by 2nd No. 57 holding a meet with No. 58 at C, which is the next station in advance. Under such circumstances it is perfectly safe and correct for 2nd No. 57 to take the first section ahead of it to C. But supposing in the above case that 1st No. 57 held an order to meet an extra at D, which extra held nothing against the second section, then the second section should not be permitted to take the first section ahead of it notwithstanding the fact that the rule gives it permission to do so by stating that when a train unable to proceed against the right or schedule of an opposing train, is overtaken between telegraph stations by an inferior train or a train of the same class having right or schedule which permits it (the second section) to proceed, the delayed train may, after proper consultation with the following train, precede it to the next

telegraph station. In the meantime the extra would overtake No. 58 at C and as the extra has right to go to D for 1st No. 57 the extra has the full authority of the rule to take No. 58 ahead of it, providing that C is a non-telegraph station.

It will be easily seen that in such a case the rule is certainly defective because orders held by a leading section are not binding on a following section, each section has equal time-table authority, and a section is a train under the rules. Therefore trainmen must be very careful when sections of the same schedule overtake each other so that no accident may occur. As a general principle, when a leading section is restricted by right, the following section should not take the leading section ahead of it, although the rule itself makes no such distinction.

RULING.—In reply to inquiries respecting Standard Rule 94 (first paragraph) the committee stated that the last sentence is intended to mean that, “until the disabled train can reach the next open telegraph office, it will assume the rights and orders of the train last taking its rights and orders.”—Oct. 8th, 1889.

The committee was requested to define the character of the disability to which this rule refers with greater distinctness. The committee thought that any trouble in regard to the meaning of the word “disabled” would only occur when it is of minor importance. In such a case the judgment of the conductors and enginemen must be used, always bearing in mind that the rule is intended to expedite movement of trains.—April 7, 1891.

CRITICISM.—Rule 95 provides that each section has equal time-table authority, that is, the first section is not restricted by any orders held by second nor is the second restricted by any orders held by the first section. A following sec-

tion cannot pass a leading section because to do so would put it out of its numerical order and ahead of the signals which give it authority to run, but at this point Rule 94 steps in and says that when a train, unable to proceed against the right or schedule of an opposing train, is overtaken between telegraph stations by an inferior train or a train of the same class having right or schedule which permits it to proceed, the delayed train may, after proper consultation with the following train, precede it to the next telegraph station. The editor cannot believe that the committee considered sections when this rule was framed for the reason that, it is so worded, if 1st No. 80 had an order to wait at a blind siding until 6 p. m. for a work train and at 5:30 p. m. it was overtaken by second section, which is unrestricted, except by the presence of the first section, it could take the first section ahead of it under the rule. We do not say that it would be foolish enough to do so, but the rule permits it. In fact the wording of the rule is such that, so far as the rule is concerned, it is unsafe to run to a meeting point with a leading section of a superior train unless given orders on all following sections. A section is a train and the rule deals with "a train." The fact that the signals displayed by the leading section must precede the following section is provided for by the rule as it requires the leading section to precede the following section and each section is a "train" within the meaning of the rule. By referring back to the example of No. 58 1st and 2nd No. 57 and the extra which is mentioned in the "Explanation" to this rule, the defective construction of the rule is at once apparent. Like a few other code rules it can be "made" to work out by reading into it what is not there, but such a method is always questionable.

Rule 94 is hostile to the principle upon which

the rest of the Code is based i. e., a principle which permits opposing trains to know what each will and can do. In the above case the work extra cannot possibly know when the second section is going to overtake the first. In other words, the working of the rule is left to chance. The trouble is that the rule attempts to cover by rule what is properly a flagging proposition.

The rule also is so framed that it will result in delays which are unnecessary. For example, No. 2 is a mail train, No. 53 and 55 are fourth class trains, No. 53 is a heavy train and leaves A with plenty of time to make C for No. 2, but is delayed between A and B until No. 55 overtakes it, with orders to meet No. 2 at C. No. 55 is the wrecker, or, say, an engine and caboose which is being hurried forward, but under this rule No. 53 is entitled to precede No. 55 to C for No. 2 and delay No. 2, 30 or 40 minutes. B is a blind siding. Many situations of this kind can arise which will give trains right to move against superior trains, on an order held by another train, when it is not desired that they move. All things considered the last paragraph to Rule 94 is dangerous and unnecessary and should not be used, as it does not harmonize with Rule 95 and 204 and therefore will not work safely when sections are concerned.

To sum up, the rule makes use of the word "train" which includes a section. It also states "right or schedule" which permits a movement against either or both.

RULE 95.

435. Q. May more than one section be run on the same schedule?

A. Yes.

436. Q. Does each section have equal timetable authority?

A. Yes.

437. Q. By whose authority shall signals be displayed?

A.

EXPLANATION.—On some roads yard-masters are authorized to issue instructions to a train to display signals. This practice is followed on roads where the business is heavy and the issuing of such orders by the dispatcher would interfere with his other duties. The practice is safe, as all sections must examine the register before leaving to ascertain that the section ahead of it registered signals.

All sections except the last must display signals. Green signals are displayed for this purpose on the front of the engine. All sections must follow each other in numerical order.

RULE 96.

438. Q. When signals displayed for a following train on single track are taken down at any point before the following train arrives, how should the conductor be governed, where there is an agent, operator, switch tender, or register book?

A. The conductor must arrange with agent, operator or switch tender to notify opposing trains of same or inferior class.

439. Q. Where there is no agent, operator or switch tender?

A. A flagman must be left to notify opposing trains of the same or inferior class.

440. Q. Must this arrangement be in writing or verbal?

A. In writing.

EXPLANATION.—If a company desires to have all opposing trains notified, the last sentence of Rule 96 can be changed to read: "to notify all opposing trains that the section for which signals were displayed has not arrived."

It is necessary to arrange for the conductor to notify opposing trains, if no other arrangement is made, because opposing trains meeting the superior train after it took down signals would have no way of knowing that a (superior) section of that train was moving to a certain station beyond the point where the superior train was met. Usually the train dispatcher takes care of the situation by issuing an order to all trains concerned.

RULE 97.

441. Q. By whose authority are extra trains run?

A. The

Note.—The code leaves the officer, who shall authorize the display of signals or the running of an extra train, to the discretion of the railroad using the rule. The superintendent's initials are generally used for this purpose.

EXPLANATION.—Whenever a train is given orders to run extra, arrangements must be made for a meeting point with all opposing extra trains. No other person than the train dispatcher must start an extra train for the reason that extra trains are not required to protect against each other, unless directed by train order to do so, and in case more than one person was allowed to originate, an extra accident might easily result.

The train dispatcher is responsible for train movement and must see that necessary orders are issued for protection of extra trains.

RULE 98.

442. Q. How must trains approach the end of double track, junctions, railroad crossings at grade and drawbridge?

A. Prepared to stop unless switches and sig-

nals are right and track clear. Where required by law trains must stop.

442a. Q. At railroad crossings at grade and draw bridges not interlocked how will trains be governed?

A. Must stop and proceed only after the proper signal has been given.

EXPLANATION.—Most states have laws which require trains to stop at drawbridges and railroad crossings at grade unless same are interlocked, or equipped with other approved device for protection. An interlocker is an arrangement of switch, lock and signal appliances so inter-connected that their movements must succeed one another in a predetermined manner.

Rule 98 is the rule which protects a train which is entering the main line from some branch. It requires all trains to approach junctions prepared to stop unless the switches and signals are right and the track is clear.

Rule 99.

443. Q. When a train stops or is delayed under circumstances in which it may be overtaken by another train how must it be protected?

A. Flagman must go back immediately with stop signals a sufficient distance to secure full protection.

443a. Q. After going back a sufficient distance to secure full protection what must flagman do?

A. Take up a position where view of himself is unobstructed.

443b. Q. How long should the flagman remain in that position?

A. Until he is recalled or relieved.

444. Q. When a flagman is recalled what should he do before returning?

A. Place two torpedoes on the rail, on the engineman's side, not more than two hundred feet apart, when the conditions require it.

444a. Q. If recalled before another train arrives at night, or when weather or other conditions obscure day signals, what must he do in addition to placing two torpedoes?

A. He must place a red fusee at the point at which he returns from and at any other point between there and his train which may be necessary to insure full protection.

444b. Q. Should a train stop between stations where view is obstructed?

A. A train should not stop at a point where the view is obstructed when it can be avoided.

445. Q. How will the front end of the train be protected when necessary?

A. By the head brakeman, or if he is unable to go the fireman must be sent out with stop signals.

EXPLANATION.—Rule 99 has provoked much discussion. Many able managers deem it insufficient as it stands in the code, but we do not think such view is warranted. We believe it is one of the best rules in the code. It places the responsibility where it belongs and does not arbitrarily send the flagman back down a heavy grade a mile or a mile and a half with a straight track for ten miles back, and thus delay a train unnecessarily while adding nothing to its safety. Besides this it is a rule that can and ought to be obeyed in every case, and this is more than can be said of most rules that are offered as substitutes. It is not good to have rules that ought not to be obeyed in some cases. Rule 99 provides that the flagman go back immediately. He must not wait for the conductor to send him or for the engineman to whistle him back.

On roads where block signals are used the

flagman is not excused from flagging, unless special rules provide otherwise. Several roads have rules which provide that a train need not flag in territory controlled by automatic block signals in case the train can plainly see that the last signal passed is in stop position, and that the signal is at least one-third of a mile in the rear of the train, provided further that this will not apply after dark or in stormy or foggy weather.

Torpedoes should not be depended upon to stop trains in snow storms. A red fusee should be used at night in such cases and every precaution taken to secure safety.

When a flagman is recalled, the rule requires that the flagman must place two torpedoes on the rail before returning when the conditions require it. The conditions which would require this action are left to the judgment of the train rule instructor, the trainmaster, or perhaps on some lines to the flagman himself. The general understanding as to the conditions which would require the placing of torpedoes would be when there is another train overdue; when the train which is being protected is in such a position as to not readily be seen; or when there is a down grade in the direction in which the train which is being protected stands; or when weather conditions are bad. In stormy or foggy weather the flagman should place one torpedo on the rail while he remains at that point, to assist him in getting the attention of an approaching train, and then when he is recalled another torpedo should be placed about two hundred feet from it and in addition a red fuse lighted for protection.

Rule 100.

446. Q. When the flagman goes back to protect the rear of train who must take his place?

A. The ——— in case of passenger train, and the next brakeman in case of other trains.

EXPLANATION.—This is done so that should the flagman become disabled, or be left behind, the rear end of the train will not be left unguarded, either at that point or some future stop.

RULING.—I would like to be advised of the particular circumstances in mind by the committee at the time this rule was formulated; the particular class of roads it was expected it would affect, and anything else in connection with the rule that will be of interest in discussing the adoption of it for our line. In looking over these rules it seems as though Rule 99 leaves a great deal to the discretion of the company in adoption of flagging rules, and that means in turn leaving something to the discretion of the conductors which is impossible to cover in carrying out the principle. Yet before we come to Rule No. 99, Rule 100 seems to lay down a very ironclad principle which, on such a single track road as ours where but two brakemen are employed on almost all freight trains, and being a level prairie road, it would hardly seem as though the rule was necessary, and it would seem best that it should be left out.

A. In answering the above question the committee stated, That in its opinion the rear of the train should not be left unguarded by the absence of a competent employe. The importance of this precaution has not until the present time been questioned, and the committee under the circumstances does not know of any better way of providing for the required protection than the manner specified in the rule.—Sept. 12, 1895.

Rule 101.

447. Q. What would you do if your train parted?

A. Would give the train parted signal and if possible prevent accident to the detached portions.

447a. Q. Has the front portion right to return for the detached portion?

A. Yes.

447b. Q. Can the detached portion be moved or passed around before the front portion returns?

A. No.

447c. Q. What is the duty of the trainmen on the detached portion?

A. They must see that no other train passes the rear portion and must notify following trains of the condition and they must also arrange to protect the head portion from collision with the rear portion when it returns.

448. Q. In case you overtake a train that is parted, how would you proceed?

A. The rear portion must not be moved or passed around.

EXPLANATION.—It is the duty of the flagman on the detached portion to flag and notify all trains following that the train has parted and also to make sure that no train passes such detached portion. The head portion has right over all trains to return for the rear portion, but as a general thing it should follow a flagman, when returning, on account of the danger of draft rigging or draw bars dropping on the track in such position as to derail the returning portion. A following train should not be allowed to shove the rear portion from where it stopped, as the head portion may know where the rear portion stopped and may be returning expecting to find it there, and besides, when the rear end and head end are both moving toward each other the chances for an accident are greatly increased. Should the head portion run by a station or more, before discovering that the train has parted, it has the same right to return for the rear portion.

Under such circumstances if the head end meets or passes any train such train must remain clear until the head end returns and until the train as a whole has passed. A train is never complete without its markers.

The question has been asked as to whether or not a superior train can pass the rear portion of an inferior train at any point when it holds no orders on the superior train. In case the train has parted it cannot, and in such case it is the flagman's duty to so inform the superior train, but in case the head portion has simply gone for water or coal or anything else, it is simply a flagging movement and does not come under the provisions of Rule 101, and therefore the superior train can proceed (unless held by flag) as inferior trains are required by rule to clear superior trains in all cases, or protect as per Rule 99.

RULING.—A freight train of fifty-five cars pulling out of a siding breaks loose three cars from the caboose. The three cars and the caboose are stopped clear on the siding by the flagman, who is on the rear end. The main line in the direction in which the train is going is down grade and around a curve so that the engineman cannot be promptly signalled. The conductor, who is at the switch, sees that the train is broken apart, and jumps on the last car attached to the train as it passes the switch, leaving the flagman on the detached portion on the siding. By the time the engineman can be signalled the train has gone so far down grade so that it cannot be backed up. The conductor, therefore, takes the portion of the train which he has to the next siding, at a distance of several miles, and returns with the light engine for the detached portion. In the meantime a passenger train running on a fast schedule, without a stop at the siding, arrives, and the flagman stops it

and informs it of the circumstances. While the flagman does not know that the conductor intends to come back with the light engine, on the chance of their doing so he notifies the passenger train and they wait. The engineer and the conductor come back with the light engine against the passenger train, presuming that it is stopped in accordance with Rule 101. The question is whether, under the rule, the engine of the freight train had a right to come back to recover the detached portion, which they knew to have been left on the siding, against the passenger train.

Another actual case, putting the point in still, perhaps, better light, is one which recently occurred. The passenger train arrives at a siding and finds a caboose with several cars in front of it with markers upon the rear end of the caboose and no trainmen at the siding. The engineer and conductor of the passenger train take this portion of a train with markers on the rear as notification of a portion of a train of which the front portion might come back, and wait at the siding until they get assurance to the contrary. It is to be observed in reference to these two cases that Rule 101 does not limit the right of a train to come back to recover its detached portion to the case of breaking in two on the main line only. On the contrary, the fact that a portion of a train with markers is found on a siding is only an indication that some break loose has happened. In the last case the indication of the switch being set to the main line would lead to presume to the contrary, but the position of the switch would not be given conclusive weight under any circumstances.

In the first case above mentioned, we would be glad to have the construction of the Train Rule Committee as to the right of the engine of the front train, under Rule 101, to come back for the

detached portion and in the second as to whether the passenger train was right in waiting on finding the detached cars with markers on the rear of the caboose standing on the siding.

Answer. In reply the committee decided that in the first case, in accordance with Rule 101, the engine had absolute right to go back to recover the detached portion of the train. In the second case, the passenger train should not have waited.—Dec. 9, 1896.

Rule 102.

449. Q. When cars are being pushed by an engine, what precaution must be taken to insure safety?

A. A flagman must take a position on the front of the leading car.

EXPLANATION.—This for the reason that a flagman on the leading car would be in a position to warn persons on or near the track and also he could see the position of other cars and switches and signal the enginemen in case of need.

Rule 103.

450. Q. Should messages or orders respecting the movements of trains or condition of the track or bridges be in writing?

A. Yes.

EXPLANATION.—If allowed to report such cases verbally the operator or other person to whom report was made might forget to notify the superintendent or might give the wrong information. Besides, it is always desirable to have such messages in writing so that they can be referred to if desired, and so they can be filed as a matter of record.

Rule 104.

451. Q. How must switches be left after having been used?

A. In proper position.

452. Q. Who is responsible for the proper adjustment of switches?

A. The conductor, except where switch tenders are stationed.

453. Q. May you leave a switch open for a train or section that is following you?

A. Not unless it is in charge of a trainman of the following train.

EXPLANATION.—In case a train backs in on a siding the engineman should give attention to the proper closing of the switch. A switch should always be kept in a certain position, and after it has been used it must be immediately returned to its proper position. When a train is approaching or passing over a switch no person should stand near the switch lever.

RULING.—The question of the proper interpretation of Rule 104 was brought before the committee, it having been stated that the word “responsible” is ambiguous.

Answer. The committee unanimously agreed that the conductor is the person to be held responsible for the proper use of the switches by himself or his trainmen and that the word “responsible” should be taken in its true, literal, dictionary sense, viz: Answerable, amendable, accountable.—April 8, 1890.

Question. An investigation of a recent accident in this state, caused by the collision of an incoming passenger train with a train standing on a passing siding, due to the fact that the switch ahead of the train on the siding was set wrong, developed the fact that there is a very marked

disagreement on the part of the general managers and operating officials of the various roads in this jurisdiction as to the construction of the Standard Code of Rules in respect of the duty of any member of a train crew that take the siding to meet a train, to have any responsibility as to the safety of the switch ahead. Some of these officials insist that Rule 104a, together with Rule 105, make it the duty of the conductor and engineer of the train on the siding in the supposed case to see that the switch ahead is safe for the main line. Others insist on the contrary, and that the requirement that any of the train crew on the siding in the supposed case should have any responsibility in regard to the switch ahead is contrary to the requirements of good railroading.

On one of the roads interested, the Standard Code Rule 104 has been modified by adding a clause: "Engineers must see that the switches at the front end of their trains are set right," and their operating officials assure me that under Rule 105 of the Standard Code they would expect the conductor to feel responsible for knowing that his train was properly protected at both ends.

Now it seems to me that a rule regulating such an important matter should be so framed that there is no need for any difference of opinion as to its meaning; and that if there is any room for such difference, the proper construction should be settled by the Association.

The committee considered the question fully and made reply as follows:

"Rule 104 of the Standard Code of Train Rules only attempts to place responsibility for the position of a switch when used by a train. It is obviously impossible to frame a rule placing the responsibility for conditions ahead of a train, other than provided in Train Rules 105 and 106."

Rule 105.

454. Q. Who are responsible for the safety of their trains?

A. Both conductors and enginemen.

455. Q. When an emergency arises which is not covered by the rules what must enginemen and conductors do?

A. Take every precaution to prevent accident.

EXPLANATION.—Rule 105 states that both conductors and enginemen are responsible for the safety of their trains, and, under conditions not provided for by the rules, must take every precaution for their protection.

In case either one fails to observe the rules or fails to have the proper authority for a movement, the other man is in position to look out for those duties, in which case he is also held responsible.

Rule 106.

456. Q. In case of doubt or uncertainty, how would you act?

A. Take the safe course and run no risks.

EXPLANATION.—Rule 106 is a good rule, but it should never be used to bolster up defective rules which can and should be remedied.

RULES FOR MOVEMENT BY TRAIN ORDERS

Rule 201.

**470. Q. For what are train orders used?
And must the prescribed forms be used?**

A. For movements not provided for by time-table; prescribed forms must be used when applicable.

471. Q. What must they contain?

A. Only information and instruction essential to such movement.

472. Q. May train orders containing erasures, alternations or interlineations be accepted?

A. No.

472a. Q. By whom are movements not prescribed by time-table authorized?

A. The superintendent (sometimes this authority is delegated to the chief dispatcher or the train master).

472b. Q. May the different forms of train orders be combined?

A. Yes, provided that no movement should be included which does not directly affect the first train named.

472c. Q. Must the prescribed forms be used when applicable?

A. Yes.

EXPLANATION.—Rule 201 is intended to prevent the sending of unnecessary orders. It is also worded in such a manner that when the different train order forms are combined in one

order care should be taken to see that all movements in the order affect the first named train. When applicable, the prescribed forms must be used. This means that the train dispatcher may vary from the forms when it becomes necessary to do so. However, the forms cover nearly any situation which can arise so they are generally applicable.

RULING.—The following questions were asked in regard to this rule:

First.—As Rule 201 only authorizes the issuance of orders not provided for by time-table, am I correct in assuming that an order does not affect a standard rule?

Second.—If train orders as per forms A to L affect rules, where will I find authority?

Third.—If orders affect time-tables only as per Rule 201, do they affect anything on the time-table, which is the existence of trains and their time and class?

Answer. The committee stated that Rule 201 authorizes the issuance of orders for the movement of trains which are not provided for in the time-table and the authority for the execution of such orders is the signature of the superintendent attached. As the time-table is made to conform to the Standard Code, the assumption that an order does not affect a Standard Rule is not correct.

In regard to the second inquiry, as has above been stated, the authority is the signature of the

In regard to the third inquiry, Rule 201 is clear when taken in connection with the form of orders and only affects what is contained in an order, and trains may be annulled and their time and class changed.—April 7, 1891.

Rule 202.

473. Q. Must train orders be given in the same words to all persons or trains addressed.

A. Yes.

EXPLANATION.—It is improper to give to a train or person only such part of an order as may directly concern them. Each order must be given in full when given under its original number.

RULING.—Order 20 gives engine 17 right to work extra between Rendville and Drakes, protecting itself against other specified extras. Order 37 gives engine 15, south bound, rights to run extra Fultonham to Drakes, which puts them over the limits assigned engine 17, saying in the order engine 17 is working extra between Rendville and Drakes, but does not say that engine 17 is protecting itself. When engine 15 arrives at Rendville, which is the northern limits covered by extra 17's orders, how does extra 15, according to the rule or order 37, get from Rendville to Drakes without flagging against extra 17? This information is asked for as it is not clear that on order 37, extra 15 can get over the limits of extra 17 working between Rendville and Drakes, without flagging. Has the explanations to the examples, given under forms of orders, anything to do with Rule 202? Should the orders not be given, and run upon, strictly in accordance with the rule? And is, or is it not, necessary under the circumstances for extra 15 to protect itself when it strikes the limit of work train extra 17?

Answer. In the judgment of the committee the orders do not violate the requirements of Rule 202, for the reason that order No. 20 to engine 17 was of such a character that no other train could be directly affected by it, and order No. 37 to engine 15 in no way affected order No. 20, held by engine 17. The answer to the last question, as to

whether engine 15 should protect itself within the limits of engine 17, is no.—Dec. 9, 1896.

Rule 203.

474. Q. At what time each day will a new series of numbers for train orders be started, and how shall they be numbered?

A. At midnight. They must be numbered consecutively.

EXPLANATION.—It is not necessary that the first order sent after midnight should be number one, although this is the usual arrangement, except where subdivisions are operated from the same dispatching office. When this is done numbers on one subdivision begin with No. 1 and on the other with No. 200, or some number sufficiently high to prevent duplicate numbers being sent.

Rule 204.

475. Q. To whom must train orders be addressed?

A. To those who are to execute them. Those for a train must be addressed to conductor and engineman and also to anyone who acts as its pilot.

476. Q. When two or more engines are attached to a train, should each engineman have copies of all orders affecting that train?

A. Yes.

477. Q. Can a train order be used by any train except the one addressed?

A. No.

478. Q. How will conductors and enginemen respect orders addressed to operators restricting the movement of trains?

A. As if addressed to them.

EXPLANATION.—When conductor or enginemen change off on the road they must trans-

fer to each other all train orders or other instructions which affect their trains.

When an operator holds an order which restricts the movement of a train, he should make copies of it and deliver one to conductor and engineman of all trains concerned, but need not take their signature (unless the rules of his road require it).

Train orders must be addressed to those who are to execute them and a copy for each person addressed must be provided by the operator.

Rule 205.

479. Q. What record must dispatcher make of train orders and when?

A. Each train order must be written in full in a book provided for that purpose and with it recorded the names of those who have signed for it, also time and signals showing what offices have repeated it and the dispatcher's initials.

EXPLANATION.—Rule 205 refers to the method of keeping the record of train orders in the train dispatcher's office. These records must be made at the time and never from memory or memoranda.

Rule 206.

480. Q. How will regular trains be designated in train orders?

A. By their numbers as "No. 10" or "2d No. 10," adding engine number if desired.

481. Q. How will extra trains be designated?

A. By their engine number, adding the direction, as "extra 798 west."

482. Q. How will other numbers and time be stated?

A. In figures only.

EXPLANATION.—The Standard Codes does not require that the numbers of trains shall be spelled out; however, many roads require that all numbers in the body of a train order shall be spelled out in full and then duplicated in figures. Where the telephone is used for dispatching trains, all numbers should be spelled out to insure accuracy of transmission.

When the engine number is used in connection with the schedule number it must be understood that, should there be more than one section on such schedule, only the leading section will be included under the provision of Rule 218, as such rule requires that the train be named by its schedule number alone; otherwise all sections are not included. When the engine number is used it identifies a certain train.

RULING.—**Question.** When there are two or more engines coupled to an extra train, which engine number should be used to designate the extra train under Rule 206? Rule 22 prescribes that the leading engine shall display the green or white signals, but the question is whether the number of the leading engines should be used to designate the extra train.

Answer. The recommendation of the committee is that the number of the leading engine should be used.—Ruling Sept. 24, 1900.

Rule 207.

483. Q. What signal does the dispatcher give to each office in transmitting an order?

A. “31” or “19,” followed by the direction, and if more or less than three copies are desired the operator is informed.

EXPLANATION.—Where the “19” and “31” order are not both in use, the signal may be omitted, except that these signals, either “19” or

"31," should be used to clear the line for train orders.

Rule 208 (A).

484. Q. To which train must the order be addressed first?

A. To the superior train.

484a. Q. Must the order be transmitted simultaneously to as many offices as possible?

A. Yes.

Rule 208 (B).

485. Q. How must a train order for two or more offices be sent?

A. Simultaneously to as many as practicable.

486. Q. How will the address be sent?

A. In order of superiority of trains.

487. Q. What does the operator at the meeting or waiting point do?

A. He must deliver copies of his order to all trains affected until all have arrived from one direction.

EXPLANATION.—Two forms of Rule 208 are submitted by the Standard Code. Rule 208 (A) does not require the order to be sent to the operator at the meeting or waiting point. Rule 208 (B) requires that it shall be sent to the operator at the meeting or waiting point.

Under either example the address must be given in order of the superiority of trains. When the order cannot be sent to all trains concerned at one time it must be sent first to the superior train. This is necessary in order to protect the movement, for should the order be sent first to the inferior train and afterward the wire go down or the dispatcher forget to send the order to the superior train accident would result.

Under 208 (B) the operator at the waiting or meeting point must take copies enough so that

he can deliver them to all trains affected until all have arrived from one direction, when, if he has no further orders, his signal may be turned to proceed. Trains receiving a copy of the order at the waiting or meeting point must be governed by it regardless of the fact that it is not addressed to them, and is addressed to the operator, because this is a special case covered by special rule.

Rule 209.

488. Q. How will operators write train orders?

A. In manifold during transmission.

488a. Q. If operator is unable to make the required number of copies during transmission, how will extra copies be made?

A. He must trace additional copies from one of the copies first made.

EXPLANATION.—If the typewriter is used for copying train orders, when additional copies are made, the order must be repeated from such copies to the train dispatcher and complete, given in the usual manner.

This is necessary in order to avoid mistakes in transcription by the operator and there should be no deviation therefrom.

Rule 210.

489. Q. How will operators proceed with repetition of a "31" order?

A. Unless otherwise directed operators must repeat orders at once from the manifold in the succession in which the several offices have been addressed, watching to see that others repeat it correctly.

490. Q. After the order has been repeated, who will sign for it?

A. Those to whom the order is addressed, except enginemen.

491. Q. What is the operator's duty in regard to the order after it has been signed?

A. He must send the signature to the dispatcher, who will give complete and the time. Also the initials of the _____.

491a. Q. What will the operator do after "complete" has been given by the dispatcher?

A. The operator will then write on each copy the word "complete," the time and his last name in full and deliver a copy to each person addressed, except engineman. Engineman's copy must be delivered to him by _____.

EXPLANATION.—The blanks in the above rule may be filled by each road to suit its own requirements. On roads where the signature of the engineman is desired, the words "except engineman" and the last sentence in the second paragraph may be omitted. If preferred, each person receiving an order may be required to read it aloud to the operator.

In the handling of a "31" order the conductor is required to call at the office and personally deliver the order to the engineman.

RULING.—**Question.** Order No. 50, sent June 30th at 10:15 p. m., for engine 15 to run extra A to Z, OK given at 10:20 p. m. I will ask if this order given June 30th and OK at 10:20 p. m., signed and made complete July 1st, 12:15 a. m., was sufficient orders for the train to move? Or, in other words, does the fact that this order was placed on June 30th and OK'd on that date and not signed for three hours, which put it in another month (July) and complete given at 12:15 a. m., make it of no value?

Answer. A train order is in effect when it has been repeated or "X" response sent as provided in Rule 214. Train orders once in effect con-

tinue so until fulfilled, superseded or annulled as per Rule 220.

Question. Under Rule 210, should train dispatcher acknowledge repetition of a train order by the operator by giving OK?

Answer. In reply to this question, the committee is of the opinion that while there is no objection to the use of the OK as suggested, the rules do not require it. It was considered by the committee not to be necessary for the safety of operation, and was, therefore, omitted.—Ruling, 1902.

Question. Who fills out the "Train Number" on bottom of 31 orders?

Answer. It is the opinion of the committee on Train Rules that the conductor, when he signs the order, should indicate the train he is running in the space provided for the purpose.—Ruling, 1905.

Rule 211.

492. Q. What is the procedure with a "19" order?

A. The same as with a "31" order, except it is not signed and complete is given by the dispatcher when the order is repeated, and the operator personally delivers a copy to each person addressed.

493. Q. If to deliver the engineman's copy would require the operator to leave the vicinity of his office, who would deliver it?

A. The ———.

494. Q. When a "19" order is issued for a train at a point where its superiority is restricted by such order how will delivery be made?

A. The train must be brought to a stop before delivery is made.

EXPLANATION.—In handling the "19" order the train dispatcher gives complete to it as

soon as it has been repeated and the operator must arrange to deliver the order to the train while it is in motion, except that when it would take the operator from the immediate vicinity of the office to deliver the order to the engineman, the engineman's copy will be delivered to him by the conductor. When a "19" order is issued to a train at a point where the superiority of such train is restricted by the order, the train must be brought to a stop before delivery of the order is made.

RULING.—Question. Can a 19 form of train order be used in moving trains whose rights might thereby be restricted? If it is not considered good practice to use this form of order, will you kindly advise the purpose for showing "X" response on the Standard train order blank for this form of order? Heretofore, our company has not used a 19 order for a train whose rights would be restricted thereby.

Answer. Yes; but the restriction of the use of the 19 order by any road so desiring is permissible under the Standard Code.

Rule 212.

495. Q. When may "X" response be given? State the manner in which it is given.

A. When directed by the train dispatcher.

495a. Q. What is the procedure?

A. When directed by the dispatcher, operator will say "X" (order) No. — to (train) No. —," with his initials and office signal. He will then write on the order his initials and the time.

EXPLANATION.—On a division where the traffic is heavy it sometimes happens that a considerable time can be saved to a train by having the operator at the point where an order is addressed to the superior train "X" the order so that it will not be necessary for him to repeat

it in full before the operator who has copied the order for the inferior train repeats his copy. In such cases the "X" response acts as a hold order and permits the movement of the inferior train before it otherwise could go; perhaps the minute thus saved will save the inferior train a stop for the order. When this is done the order must be repeated in the regular manner as soon as possible thereafter.

Rule 213.

496. Q. When may complete be given to an inferior train?

A. Not until the order has been repeated or "X" response sent by the operator who receives the order for the superior train.

EXPLANATION.—"Complete" must not be given to a train order for delivery to an inferior train until the order has been repeated by the operator who holds the order for the superior train, or until he gives the "X" response. Complete must not be given to an order to a superior train when such order has only been receipted by the "X" response and has not been repeated.

Rule 214.

497. Q. How is an order regarded before complete has been given and after it has been repeated or "X" response sent?

A. As a holding order for the train addressed.

498. Q. When a "31" order has been sent and repeated, or "X" response sent, and before "complete" has been given, the wire fails, has the train to whom this order is addressed the right to proceed?

A. No.

499. Q. If the line fails before an office has

repeated an order or "X" response has been sent, is the order effective?

A. No.

EXPLANATION.—Supposing an order has been sent for a train at B. If the wire fails before the operator at B has repeated it or before he has given the "X" response for it, the order must be treated as though it had not been received. But if the wire fails after the order has been repeated or its receipt acknowledged by the "X" response, then it acts as a holding order for the train addressed. Roads which use "19" orders for all movements have no trains tied up account of wire failure except in case the "X" response is given to an order and the wire fails before it is repeated and "complete" received.

RULING.—Question. Please refer to Rule 214, second paragraph, reading: "If the line fail before an office has repeated an order or has sent the "X" response, the order at that office is of no effect and must be treated as if it had not been sent." A rule has been proposed as a companion thereto which will admit of trains moving in case of wire trouble. We have had some serious delays occur by reason of a ruling train having to be held indefinitely for "complete" to an order, the time in which had expired or about expired. The rule proposed reads as follows: "If the line fails after an office has repeated an order for which OK and the acknowledgment has been given and the dispatcher cannot be reached to give complete to same, the operator will complete and deliver the order in the usual manner, writing after the word complete, "as per Rule 210A," and permit the train to proceed. The operator will notify the dispatcher of his action as soon as communication is restored. The conductor and engineman will advise the dispatcher from the first open telegraph office from which he can be

reached. I will be pleased to know what your experience has been and what your practice is, also to have you criticise the proposed rule.

Answer. The committee does not approve the proposed rule nor does it think it wise to make any change in the method of handling the "31" order. If greater freedom is desired Rule 211 provides for the use of the "19" order and will avoid the suggested difficulty.—Oct. 14, 1908.

Rule 215.

500. Q. What copy of a train order must the operator keep?

A. The lowest copy.

EXPLANATION.—This is done as all the signatures will appear on the lowest copy and also because the lowest copy is liable not to be as plain as the other copies.

Rule 216.

501. Q. What are the requirements when orders are delivered by the train dispatcher?

A. The same as at other offices.

EXPLANATION.—Some roads require that an operator in the dispatcher's office copy the order during transmission the same as is done at other offices, for only in this manner can the rule be fully observed.

RULE 217.

502. Q. How should an order be addressed to a train which cannot be reached by telegraph?

A. C. & E. No. — at ——— care of ———.

503. Q. Whose signature must be taken before "complete" is given when form 31 is used, and with what copies should the person delivering the order be supplied?

A. The signature of the person in whose care the order is sent; one for enginemen, one for

conductor, and one for the person who delivers the order.

504. Q. What must he do with the copy he retains, and whose signature must appear thereon?

A. The signature of the conductor and engineman of the train which is to use the order must appear on the order. He will deliver this copy to the first telegraph operator accessible.

505. Q. Will the train receiving this order act on it as if complete had been given in the usual manner?

A. Yes.

506. Q. For orders sent as above can complete be given to an inferior train before the signature of the conductor and engineman of the superior train, whose rights are thereby restricted, have been received?

A. No.

EXPLANATION.—It sometimes happens that a train is delayed at a blind siding until it is unable to proceed against opposing trains, and in such a case it becomes necessary to send train orders to it in care of some person. When the "31" order is used in a case of this kind "complete" will be given to the order upon the receipt of the signature of the person in whose care the order is being sent. This person must be supplied with copies for the conductor and engineman of the train addressed, and also a copy on which he must take the signature of the conductor and engineman of the train addressed, which copy will then be delivered to the first telegraph operator accessible, who will immediately transmit the signatures to the train dispatcher. Orders so delivered will be acted upon as if "complete" had been given in the usual manner. When orders are sent to a train at a non-telegraph station which restrict the superiority of such train, "complete"

must not be given to the inferior train until the signature of the conductor and engineman of the train at the non-telegraph station have been sent to the train dispatcher.

Under no other conditions does the Standard Code require enginemen to sign train orders except in case a train order is sent to a train at a station after the train has been cleared or the engine has passed the train order signal.

RULE 218.

507. Q. When a train is named in an order by its schedule number alone are all sections included?

A. Yes.

507a. Q. Must each section have copies of the order delivered to it?

A. Yes.

EXPLANATION.—When a train is named in a train order by its schedule number alone it has the same effect as if all sections were mentioned in the order. When possible the train dispatcher should designate each section, but as this is not always possible, Rule 218 furnishes a necessary explanation. When an order has been given for No. 1 to meet No. 2 at D and there are two sections of No. 1, and it is desired to make a meet at C for No. 2 and 2d No. 1, the order should read, “No. 2 meet 2d No. 1 at C instead of D.”

To fully understand the effect of Rule 218 on an order one has simply to substitute the number of sections for the schedule number which has been used. For example, extra 2652 was given an order to run ahead of No. 21 until overtaken. No. 21 passed extra 2652 at C. In this case the order gave 2652 right to run ahead of all sections of No. 21, because the order named the train by its schedule number alone, and, because of this, when the first section overtakes extra 2652 it can

pass, and extra 2652 can proceed ahead of 2d No. 21 until 2d 21 in turn overtakes the extra, when it can pass. In connection with this you will note that the rule requires that all sections must have a copy of the order, which makes the movement entirely safe and fully understood by all sections of No. 21. If it was the intention that the order simply cover a movement ahead of the first section, in such a case, then the rule would be in error in directing that all sections must have copies of the order, since in that case it would not affect any but the first. In short, when a train receives an order with respect to another train, which is mentioned by its schedule number alone, it must be regarded as including all sections. Each section receiving such an order must be prepared to execute the order. In fact, to understand such an order, substitute the words "all sections of No. 21" for the words "No. 21," and the meaning will be clear.

But it must be kept in mind that when the engine number is used in connection with the schedule number in a train order, all sections are not included, for the reason that the train has not been named by its schedule number "alone." Going back a little in the history of train rules it will be recalled that the Standard Code did not use the words, "By its schedule number alone" until the year 1906. Before that time the words, "unless particular sections are mentioned" were used. The reason for the change should be apparent. Investigation developed the fact that some roads were using the conductors name in addition to the schedule number and other roads were using the engine number in addition to the schedule number for the purpose of identifying a train. It was clearly recognized that when anything was added to the schedule number it was for the purpose of identifying a particular train and the wording of

rule 218 was changed to make it impossible for an order reading, "No. 99 engine 25" to include "2nd No. 99 engine 546." Or for an order reading "No. 99 Smith," to include "2nd No. 99 Brown."

Under the Standard code the engine number may be used if desired but if used all sections are not included. Some roads permit orders to be sent reading, "No. 99 engine unknown." Such practice is objectionable and is improper under standard rule 201 which requires that orders contain nothing which is not essential to such movement. The words, "engine unknown" are about as useless as anything which can enter into the construction of a train order. They do not assist in identification of a train nor in the execution of the order and should never be used as they are not authorized by standard forms or practice.

RULE 219.

508. Q. May an operator repeat or give the "X" response to a train order for a train, the engine of which has passed his train order signal, before he has ascertained that the conductor and engineman have been notified that he has orders for them?

A. No. Not unless otherwise directed.

EXPLANATION.—It is understood in Rule 219 that it refers to the engine passing the signal while in the clear position, otherwise the signal would govern, and besides engine has no right to pass a train order signal while in the stop position.

When an engine has passed the signal and it is desired to get orders to it the signature of the conductor and engineman must be obtained to the order before acknowledging receipt of the order. The rule says, "unless otherwise directed;" this means that in case the order is one which the train requires for its own movement before it can leave

the station, then the dispatcher can "otherwise direct" the operator, who may then repeat the order before obtaining the signatures.

RULE 220.

509. Q. How long do train orders, once in effect, continue so?

A. Until fulfilled, superseded or annulled.

510. Q. May part of any order specifying a particular movement be annulled or superseded?

A. Yes.

511. Q. Are orders held by or issued for a train which has lost its rights as per Rule 4 or 82, effective?

A. No.

512. Q. Does a part of an order relating to a regular train become void when such train loses both right and schedule as per Rule 4 and 82 or is annulled?

A. Yes.

EXPLANATION.— It is understood that when a train reaches its terminal all orders which it holds become void. It is also generally understood that when an extra train expires by limitation of time or place, any orders it holds become void unless special rules otherwise provide.

Train orders once in effect continue so until fulfilled, superseded or annulled.

Any part of an order specifying a particular movement may be either superseded or annulled. When an order, or part of an order, is superseded the words "instead of" are always used. If they are omitted no supersedure takes place. Orders held by or issued for, or any part of an order relating to a regular train, become of no effect when such train is annulled. The rules do not specially state the fact, but it is generally conceded that when a train reaches its terminal station on a

division, any train orders held by that train become of no effect. The terminal station of an extra train in such cases is considered to be the station to which they held orders to run extra and if upon arrival at such terminal station they are given orders to proceed extra to a new terminal station, should any orders which they held be needed to protect them on the new run, such orders must be repeated to them by the dispatcher when he creates the run.

RULING.—Suppose an order is issued to No. 1 at A and No. 2 at C, reading: “No. 1 will wait at B until 5 p. m. for No. 2.” No. 1 being the superior train. Subsequently an order is issued to No. 1 at B and No. 2 at C, reading: “No. 1 and No. 2 will meet at C.” Does the latter order cancel the previous time order?

Answer. The committee refers to the first paragraph of Rule 473 (now Rule 220), “Train orders once in effect continue so until fulfilled, superseded or annulled.” Therefore, if the train order had not expired at B, then that order must be annulled before the meeting order would be effective. Under the conditions named the second order should preferably read: “Order No. — is annulled. No. 1 and No. 2 will meet at C.”

CRITICISM.—Rule 220 does not cover the situation as fully as it might. We suggest that there be a paragraph added to the rule reading: “Orders held by, or any part of an order relating to, an extra train, become void when the existence of such train ends by limitation of time or place, or when the order creating it is annulled or superseded.” With an addition of this kind the rule would cover the situation and clear up several points which are now serious questions of procedure.

RULE 221 (A).

Note.—On roads where the normal indication of the signal is “proceed” the examiner will omit Questions on Rule 221A.

513. Q. What will the fixed signal indicate at each train order office when the operator is on duty?

A. Stop.

514. Q. May a train pass the signal while stop is indicated?

A. No.

515. Q. When will this signal be fastened at “proceed?”

A. When no operator is on duty.

516. Q. If a train order signal is not displayed at a night office, what is required of conductors and engineers?

A. Stop and ascertain cause and report the facts from the next open telegraph office.

517. Q. What signals must operators keep on hand to use if fixed signal fails?

A. Hand signals.

Note to Rule 221A.—The conditions which affect trains at stations vary so much that it is recommended each road adopt such regulations supplementary to this rule as may best suit its own requirements.

EXPLANATION.—There are two rules shown in the Standard Code governing the use of the train order signal.

The first rule (221A) is intended for use on roads where the normal indication of the signal is “stop.” The other rule (221B) is to be used on roads where the normal indication of the signal is “clear.”

Rule 221 (A) requires that fixed signal must be used at each train order office, which must

indicate "stop" when there is an operator on duty, except when changed to proceed to permit a train to pass, after giving it orders, or for which there are no orders.

If the fixed signal is not displayed at an office where an operator should be on duty at night, trains which have not been notified otherwise must stop and find out the cause, and report the facts from the next open telegraph station. When the semaphore is used at a train order station it will indicate "stop" when horizontal; and proceed, when in an inclined position.

When stop is indicated a train must not pass the signal. When the signal is cleared for a train to pass, it must be returned to stop as soon as the train is by. It may only be fastened in the proceed position when there is no operator on duty. Operators must provide themselves with proper appliances for hand signaling and have them ready for immediate use, if for any reason the fixed signal should fail to work properly.

RULE 221 (B).

Note.—On roads where the normal indication of the signals is "stop," examiners will omit Questions on Rule 221B.

518. Q. What kind of a signal must be used at each train order office?

A. A fixed signal.

518a. Q. What will the fixed signal at each train order office indicate when there are no orders?

A. Proceed.

519. Q. When there are orders what will it indicate?

A. Stop.

520. Q. When an operator receives the signal "31" or "19" what will he do?

A. Immediately display stop signal and reply, "stop displayed."

521. Q. Must the dispatcher give direction when he gives the "31" or "19" symbol?

A. Yes.

522. Q. When train order signal is displayed at stop, under what conditions may a train pass it?

A. When a clearance card is issued.

523. Q. If signals are not displayed from a night office, what must trains do?

A. Stop and ascertain cause and report from next open telegraph office.

524. Q. In what position is the signal to indicate stop?

A. _____.

525. Q. Must operators keep hand signals ready for use should fixed signals fail?

A. Yes.

Notes to Rules 221A and 221B.—The Committee has recommended two forms of Rule 221, leaving it discretionary to adopt one or both of these forms according to the circumstances of the traffic.

EXPLANATION.—If a train stops while stop is indicated and operator changes signal to proceed, the train may go on signal from conductor, without orders or clearance card, provided the engineman can see that the signal is clear.

Rule 221 (B) requires that a fixed signal must be used at each train order office, which must indicate stop when trains are to be stopped for orders, but when there are no orders the signal must indicate "proceed." When the operator receives the signal "31" or "19" followed by the direction, he must immediately display the stop signal for the direction indicated and reply "stop displayed," and until the orders have been delivered or annulled the signal must not be restored to proceed. The operator in saying "stop displayed" will use the letters "s. d.," which stand for

"stop displayed." While stop is indicated trains must not proceed without a clearance card. Operators must provide themselves with proper appliances, ready for immediate use, so they can signal the train by hand, should the fixed signal fail to work.

If a signal is not displayed at an office, which should be open at night, trains which have not been notified that such office is closed, must stop and ascertain the cause, and report the fact from the next open telegraph station. When the semaphore is used at a train order station it indicates "stop" when horizontal and "proceed" when in an inclined position.

NOTE.—When an order is put out at an office at an hour when such office is supposed to be closed, extra precaution must be taken to insure delivery of the order. The train should be notified at open office that the "closed" office will be opened and a flag should be used in addition to the signal. Accidents have resulted because extra precaution was not taken in cases of this kind.

RULE 222.

526. Q. Will operators record the time of trains and report same?

A. Yes.

EXPLANATION.—In our opinion there is too little attention given to Rule 222. When a dispatcher is calling an operator for an O. S. his time is being wasted and the movement of trains is correspondingly impaired, and if there was nothing more to be said on the subject than this it would merit more attention than it now receives. But there is another and more serious side to Rule 222. A great many collisions have been prevented by a prompt train report being given to the train dispatcher, which has enabled him to stop some opposing train in time to prevent an accident. A few

minutes delay in an O. S. and both trains may be between stations where they cannot be reached.

In looking over a detailed report of accidents you will find that quite a number of them could have been prevented by the prompt report of a train to the dispatcher.

RULE 223.

527. Q. May specified signs be used?

A. Yes.

EXPLANATION.—This rule concerns the movement of trains by telegraph and it permits the use of the following abbreviations and signals:

Initials for the signature of the _____.

Such office and other signals as are arranged by the _____.

C & E for the Conductor and Engineman.

X—Train will be held until order is made “complete.”

Com — for Complete.

O S — Train Report.

No — for Number.

Eng — for Engine.

Sec — for Section.

Psgr — for Passenger.

Frt — for Freight.

Mins — for Minutes.

Jct — for Junction.

Dispr — for Dispatcher.

Opr — for Operator.

31 or 19 — to clear the line for Train Orders, and for Operators to ask for Train Orders.

S D — for “Stop Displayed.”

The usual abbreviations for the names of the months and stations.

FORMS OF TRAIN ORDERS

EXPLANATION.—When the conductor signs an order he is responsible for his train being safely held or moved in accordance with the order. The engineman is equally responsible, but not until he has received his copy of the order. The conductor has not the right to sign for an order unless he is sure that he has train fully in his control.

When a train is run extra on a schedule such extra does not lose its rights when it is 12 hours late.

When one train holds orders concerning another train which has become twelve hours late, such orders, or parts of orders as relate to the train which is twelve hours late, become of no effect. When a train reaches its terminal, any orders which it may hold become void, and should the same crew be started out from that terminal on another train, it must be given new copies of all orders by which they are to be governed. The terminal for an extra train is considered as being the point to which it is ordered to run extra. If such extra train is moved beyond this point on a subsequent order it is considered as being a new train, and must be protected as such. A regular train exists by authority of its schedule, on certain days, between definite points; an extra exists by authority of the train order, which gave it right to run from one certain point to another certain point and it has no existence except between those certain points. Consequently all orders addressed to it must be limited to the particular train to

which they are addressed; also for use on the particular portion of track over which such train is authorized to move, and these orders necessarily cease to exist when that particular train ceases to exist.

When a train is annulled, as per Form K, all orders held by that train, or held by other trains concerning such train, become void. When a train loses its right and schedule, as per Rule 4, any train orders which it holds become void. Except as above stated, all train orders once in effect continue so until fulfilled, superseded or annulled.

A train order is considered fulfilled when all provisions contained in the order are carried out. To supersede an order or part of an order the words "instead of" must always be used, and then, only such part of the order is superseded as the words "instead of" refer to. There may be two or three meeting points in an order, one or more of which can be superseded; any provision that can be specified can be superseded in a train order. A train order or part of an order can be annulled by a subsequent order stating that, "that part of order No. _____ reading _____ is annulled." In case the whole of the order is to be annulled, the annulling order simply refers to the number of the order which is to be annulled.

All roads are not uniform in the use of the "19" and "31" train order. Under the Standard Code the "19" order can be used for any purpose, but some roads restrict the use of the "19" order to movements which do not restrict the right of the train addressed. All standard forms of orders with one or two exceptions are so worded that the order which takes away superiority from one train, confers it upon another in the same words.

The rules provide that train orders automat-

ically supersede time-table authority with which they conflict.

Orders should never be given directing a train to run ahead of time, for the rules do not protect a train ahead of time. If it is desired to run a train ahead of time it should be run extra.

Trainmen should furnish the dispatcher with all the information possible concerning their train, so that its movements may be anticipated fully. When a train has work to do at a station the dispatcher should be kept posted as to the progress of the work.

Train orders which are not easily read, or which contain changes or erasures, or contain words between the lines must be refused by trainmen, as such orders are liable to be misleading, and thus cause confusion or accident.

Any of the prescribed forms may be combined with other forms but good judgment, backed up by the wording of Rule 201, dictates that no movement should be put in a train order which does not directly affect the first train named in the order.

The method of handling train orders is fully explained in Rules 201 and 223. The Standard Code provides that train orders should be issued as outlined in the different train order forms which the Code contains. If it becomes necessary to depart from the authorized forms it is permissible to do so, but there are very few cases in which it becomes necessary to improvise forms to cover a special complication.

When train orders conflict they should not be acted upon.

The fact that one train order may bear a higher or a lower number than another must not be taken as authority to obey one and disregard the other.

Form A.

595. Q. How will two opposing trains holding orders to meet at a certain station run with respect to each other?

A. Run with respect to each other to the designated station and there meet in the manner provided by the rules.

596. Q. In the case of trains of the same class, what rule is referred to?

A. Rule 88, with respect to taking siding.

597. Q. If the trains are of different classes, what rule is concerned?

A. Rule 89.

598. Q. Should a meeting order be sent for delivery to a train at the meeting point?

A. Not if it can be avoided.

599. Q. If an order is sent to the meeting point what should be added to the order?

A. "No. — gets this order at —."

600. Q. If, as conductor or engineman of No. 2 you held an order reading "No. 2 meet No. 1 at A" and No. 1 arrived at A displaying signals, how would you be governed?

A. Would remain at "A" for following sections. This because Rule 218 states that when a train is named in a train order by its schedule number alone all sections are included.

601. Q. If you held an order to meet 2d No. 1 at "A" and 2d No. 1 arrived with signals, how would you be governed, No. 2 being a train of superior class?

A. Would proceed, as a particular section was mentioned in the order, therefore no other sections were included.

602. Q. If second No. 1 arrived without signals and with no markers, would you proceed?

A. No; a train must not be considered as having been met until its markers have arrived.

603. Q. If as conductor or enginemen of No. 2 you held an order reading "No. 2 meets 1st No. 1 at C and 2d No. 1 at E" and on arrival at E you received an order reading, "No. 2 meet 2d No. 1 at F," how would you be governed?

A. Would remain at "E" until got proper orders; as the order to meet at "F" does not contain the words "instead of," it does not supersede the former order, therefore the orders conflict, and No. 2 should not proceed until the orders are corrected.

604. Q. If No. 2 held order No. 1 reading "No. 2 meet No. 1 at B," and No. 1 arrived at B with signals and another order was given reading, "No. 2 meet 2d No. 1 at C instead of B" and when No. 2 reaches C it finds 2d No. 1 displaying signals, what must it do, No. 2 being a train of superior direction?

A. No. 2 must immediately get clear expecting 3rd No. 1 to be on their way to B under the right conferred by order No. 1, as only that part of order No. 1 was superseded that referred to 2nd No. 1.

Rule 218 is so worded that it requires order No. 1 to be delivered to all sections of No. 1 as all sections are included—No particular section being specified.

604a. Q. If an order was issued reading No. 2 meet No. 1 engine 546 at B and No. 1 engine 546 arrived at B displaying signals; how would No. 2 be governed?

A. No. 2 could proceed as No. 1 was not named by its schedule number alone, the engine number having been added.

EXPLANATION.—Supposing the following orders were issued: "No. 1 meet No. 2 at A. No. 2 take siding." "No. 1 meet No. 2 at B instead of A." Which train will side-track at B? Under the rules No. 2 should side-track at B, as the first

order was a two-movement order and only one movement has been superseded. In support of this position it must be admitted that No. 2 has certain privileges any one or more of which may be taken away by train order. For example, No. 2, a train of superior direction, may proceed against No. 1. However, when a meeting point is fixed with No. 1 the privilege to proceed against No. 1 beyond such point is taken away, but it still has the privilege of holding the main track at the meeting point unless it is also taken away. Both of these privileges are separate and distinct and the superseding of the meeting portion of the order does not supersede the side-tracking provision any more than the superseding of the side-tracking provision supersedes the meeting point provision. In fact the order to side-track might be a separate order reading: "No. 1 side-track for No. 2." The effect is the same in either case. But for the reason that all men do not understand this point alike, every railroad company should make a ruling on this point one way or the other, so that trainmen will know what is expected of them.

The explanation following Form A reads, "Trains receiving these orders will run with respect to each other to the designated points and there meet in the manner provided by the Rules."

At a meeting point between two trains should either one arrive without markers, no movement can be made by the opposing train until the markers arrive, as they indicate the rear end of a train.

Referring to No. 2 holding an order to meet No. 1 at A and being instructed thereby to take siding and later the meeting point being changed to B; in this case it must be understood that No. 2 is to take siding for No. 1 and to fulfill the train order No. 2 must take siding where it meets No. 1. If the take siding only applied at A then No. 2

could pull through the siding at A and fulfill that portion of the order, or if we are to hold that the take siding can only be fulfilled at A then we must insist that No. 2 has no authority to leave A until that portion of the order is superseded or annulled.

RULING.—Q. Assuming that a road is working under Standard Rule for single track, and is double track between A and B, single track between B and C, and double track between C and D.

In case order is issued: "Engine 1 will run extra A to D and meet No. 2 at C." Will it be necessary for Extra 1 to wait at C until No. 2 arrives, in the absence of any orders regarding No. 2 using the track which extra 1 would use under time-table rules C to D, both C and D being register points so that No. 2 would know that extra 1 had arrived at C?

A. In answering, attention is called to the fact that the inquiry is based on the use of a wrong form or order, and therefore is not one which the committee can rule on. An order as per form C should have been used, reading: "Extra 1 has right over No. 2 B to C."—Ruling Sept. 11, 1901.

"No. 40 and work extra 237 will meet at Rome." At 8 p. m. on the expiration of the work limits, work extra has not reached Rome. How are both trains to be governed after this hour?

A. No. 40 could not pass Rome without orders, and if work extra 237 had orders to work only to 8 p. m., it has no right to the track after that hour. Under the circumstances, the Form E should have been used.—Sept. 7, 1893.

DECISION.—In answer to a question submitted, the committee stated that the two forms, Form A and Form C, may be used in conjunction for the same trains.—April 14, 1892.

Q. Train No. 2, ruling train on account of direction, receives an order to meet train No. 1 at

station and take siding. Later, this order is changed by an order reading, "No. 2 will meet No. 1 at B instead of A." In the later order, nothing is said as to which train shall take the siding. Under this order, the trains meeting at B, which train should take the siding?

A. The superseding order would be an improper one under the circumstances and the first order should be annulled in order to avoid misunderstanding. Should the orders be sent as indicated in the question, it is the committee's opinion that No. 1 should take the siding at B. The first order specifically directed that No. 2 should take siding at A and the new order changes the meeting point to B, but does not specifically state that No. 2 is to take the siding; hence, the trains would naturally revert to their original authority to the main track.

NOTE.—The committee's reply does not seem to be clearly defined. The first sentence of the reply is correct under standard rules but the balance of the reply is not based upon a clear understanding of the right conferred by the order, but instead permits an authorized movement to go by default without due process of rule as outlined in the standard code itself. It is the Editor's opinion that no attempt should be made to straddle the question. If that part of the order should have been superseded then it clearly indicates that that part of the order is still in effect and as the take siding can only apply between the trains involved the ruling does not appear logical.—Editor.

CRITICISM.—Form A is defective in that it fails to provide an example directing a superior train to take siding at the meeting point with an inferior train. It should contain a note after example (1) reading, "This form may be modified by adding: No. ——— take siding." Also a note should be added to the explanation reading,

"When a superior train is ordered to take the siding at the meeting point, such provision applies only at the meeting point made by the order containing the take-siding provision."

Or if it is desired that the "take siding" provision remain in effect until fulfilled, superseded, or annulled, the proposed explanation should be omitted.

FORM B.

605. Q. If as conductor or engineman of No. 1, you held an order reading: "No. 1 pass No. 3 at A" how would you be governed?

A. Approach A — prepared to stop, unless could plainly see that No. 3 was clear and switches all right.

606. Q. If as conductor or engineman of No. 6 you held an order reading: "Extra 580 East run ahead of No. 6 A to B," how would you be governed?

A. Would not pass the extra or exceed their speed between the points named, and would approach B — prepared to stop unless Extra 580 was clear and switches all right.

607. Q. If Extra 28 received an order reading: "Ex 28 pass No. 2 at C" would this be sufficient for the extra to pass and proceed ahead of No. 2?

A. Yes. An order for an inferior train to pass a superior train is authority for the inferior train to pass and proceed ahead of the superior train.

608. Q. Do trains of any class require orders to pass trains of the same class in the same direction?

A. No.

609. Q. Do extras require orders to pass extras?

A. No.

EXPLANATION.—When an inferior train receives an order to pass a superior train, right is conferred to run ahead of the train passed from the designated point.

A train receiving an order to run ahead of a superior train until overtaken must arrange for the rear train to pass promptly when overtaken.

A train running to a designated point ahead of a superior train must clear promptly upon arrival at that point.

Nothing in a Form B order must be construed so as to relieve trainmen from the duty of protecting their trains as required by rule.

Some hold the idea that an order to run ahead of another train gives such train some sort of protection more than it had before with respect to flagging, but such is not the case. When an order is issued for one train to run ahead of another both trains must exercise the same care as before, no more or less; enginemen must at all times keep a sharp lookout ahead for flag or for obstruction on the track and the flagman of any train must go back immediately with stop signals if his train is delayed under circumstances in which it may be overtaken by a following train. The idea in requiring extra trains or trains of an inferior class, to keep clear of trains moving in the same direction which are of superior class, is not as a protection to either train concerned but it is for the purpose of permitting the more important trains to move with little or no delay by the less important trains.

Example (3) arranges for an inferior train to run ahead of a regular train from one definite point to another. When this form is used the standard code requires that the second-named train must not exceed the speed of the train which is running ahead of them between the points designated. Such instructions are rather vague

and in most cases cannot be obeyed. In fulfilling this requirement we prefer that the student consider the explanation as meaning that the second-named train will run with such caution as to prevent accident with the first named train between the points named.

RULING—Q. The question has been asked me whether the train order Form B (3) gives the first-named train the right to run on the time of the second-named train, and if so, under what regulations?

A. Yes; under the restrictions as given in the last paragraph of Form B (now the explanation to (3).—Ruling Sept. 24, 1900.

Q. At a meeting recently held for the purpose of revising our book of Rules and Regulations of the Operating Department, a discussion was had concerning Example 3 of Form B Train Order, wherein it is stated that the regular train will not exceed the speed of the extra train between the designated points. The question was raised as to how the regular train would determine the speed of the extra train.

A. The Standard Code of The American Railway Association does not provide for rules covering certain details of operation, but as pointed out in numerous foot notes, leaves such matters to be covered by each road to suit its individual requirements. The Committee on Train Rules does not attempt to establish speeds for extra train movement. In the case of railroads equipped with automatic or other block signal systems, the answer to this question is found in the protection afforded by such system. In the absence of block signals, information covering speed would probably be found in the special instructions contained in the time-table, or by bulletin notice, or other practice in vogue. Thus, if the rules of the railroad restricted the speed of

extra trains to 30 miles per hour, the second named train would not, under Example 3 of Form B, exceed those speeds. If, however, there were no rules in force placing a speed restriction upon extra trains, it would appear that Rules 105 and 106 should apply in the case of the second named train, and that good judgment and knowledge on the part of the engineman of that train as to the average, or probable, speed that an extra train would actually make on that portion of the road should govern.

Question.—Extra 1540 west received the following order: "Extra 1540 west run ahead of No. 3, engine 2189, B until overtaken." Extra 1540 west is overtaken by No. 3 displaying signals. Has extra 1540 west the right to proceed ahead of 2nd No. 3?

Answer.—Under the order quoted extra 1540 west will run ahead of No. 3 until overtaken and then arrange for No. 3 to pass promptly. Rule No. 95 reads: "Two or more sections may be run on the same schedule. Each section has equal timetable authority." Rule 218 reads: "When a train is named in a train order by its schedule number alone, all sections of that schedule are included, and each must have copies delivered to it." It is therefore necessary for extra 1540 after being overtaken by 1st No. 3, unless otherwise directed, to remain on the siding until all sections of No. 3 have passed.

Note.—In the question submitted to the Association it will be noticed that the engine number was used in connection with the schedule number of No. 3, and for this reason the order could not come within the scope of standard rule 218, which requires that the train must be named by its schedule number alone.—Editor.

CRITICISM.—The explanation to example (3) states that the second-named train must not

exceed the speed of the first-named train between the points designated. As a matter of fact this provision is almost impossible of fulfillment, and granting that the second-named train could maintain the same speed as the last-named train, it would be no assurance that the second-named train would not run into the first-named train. The explanation should read, "The second-named train will run with such caution as to prevent accident with the first-named train." Or better still, the explanation should simply state the fact that extra 594 east would run ahead of No. 6, M to B, and there arrange for No. 6 to pass promptly. This for the reason that enginemen must at all times keep a close lookout for trains ahead and also flagman must protect the rear end of a train, therefore the necessity for special instructions with regard to caution in this particular case seems superfluous.

FORM C.

610. Q. If, as conductor or engineman of No. 2, you held an order reading: "No. 1 has right over No. 2 A— to F—," would you pass F— before the arrival of No. 1?

A. Yes, in case we had our running time and clearance to make an intermediate point for No. 1.

611. Q. If, as conductor or engineman of No. 2, you held an order reading: "Extra East 580 has right over No. 2 A— to F—," would you go beyond F— before the arrival of the extra train, and if not, why?

A. No; because Extra 580's time is not restricted by time-table.

612. Q. As conductor or engineman of Extra East 580 — how would you be governed?

A. Proceed from A— to F— against No. 3 and take the sidetrack at F—.

613. Q. If your order to run extra extended

beyond F— and No. 2 had not reached there on your arrival, would you proceed against No. 2, and if so, under what circumstances?

A. In case we had time to make a point beyond F— and clear the time of No. 2, would proceed, clearing their time as required by rule.

614. Q. If you were on No. 2, a superior train, and held an order reading: "No. 1 has right over No. 2 A— to F—," and you should receive another order reading: "No. 2 meet No. 1 at C—," would you pass F—?

A. Yes; would proceed to C and take siding for No. 1. The right of track order simply reverses the rights of the trains between the points named.

615. Q. If you were on No. 2 and held the same orders, except the meeting point was at A—, would you take siding?

A. No. If trains meet between the designated points No. 2 must side-track, but if at either of the designated points. No. 1 must side-track.

616. Q. When a right of track order is given to a train of inferior class against a train of superior class to a designated point, which train is required to take the siding?

A. If met between the points named in the order, the train of superior class.

618. Q. If a right of track order is given an extra train against a superior class train to a designated point, can the superior class train move beyond that point if the extra has not arrived?

A. No.

EXPLANATION.—The avowed intention of a Form C order is simply to reverse the rights of trains. An inferior train moving under a Form C order against a superior train has the same superiority over such train as such superior train had over said inferior train before the Form C order was issued.

A right of track order gives right to the train first named over the other train or trains between the points named, and if the trains meet at either one of the points named, the first-named train must take siding if they meet between the points named the second-named train or trains must take siding.

When an extra train is given right over a regular train the regular train must not go beyond the point last named until the extra train arrives.

RULING.—Q. There has recently been considerable discussion among transportation men in this locality embracing several of the larger railroads, in regard to Form C, and by a number it is stated that this Rule is not clearly understood, although embodied generally in all Books of Rules.

We think we understand all but the last paragraph wherein it specifies, that if the second named train, "before meeting," reaches a point within or beyond the limits named in the order, the conductor must stop the other train where it is met and inform it of his arrival.

We do not see how the second train can get beyond the limits without a second order making a meeting point or in some similar manner advising the first named train of the identity of the second train. If so this necessity for stopping and advising what train it is appears to us to be superfluous.

The special point in this paragraph is the words "before meeting," which causes difference of opinion.

A. Form C was formulated for the purpose of reversing the superiority of trains, the inferior train becoming superior within the limits named in the order.

The intention is that the second named train may continue until it meets the first named train,

clearing it properly within the limits named in the order.

The paragraph to which reference is made is intended to insure the identification by the first-named train of the second-named train wherever they may meet, so that the first-named train may continue beyond the limit named in the order.—Ruling March 11, 1903.

Note.—Since this ruling was made, the explanation containing the words “before meeting,” has been eliminated.

Q. What is the general practice where rights are extended as well as shortened? For example: Order No. 1. No. 1 has right over No. 2 A to D. Order No. 2. No. 1 has right over No. 2 to G; would you say No. 1 has the right over No. 2 to G instead of D?

A. The examples here given are not in accord with the Standard Code practice. The question may be answered by simply quoting from the Standard Code the forms therein provided, and which should be used:

Form C, Order No. 1. No. 1 has right over No. 2 A to D. Form P. Order No. 2. No. 1 has right over No. 2 A to G instead of D.—Ruling Sept. 21, 1904.

Question. If an inferior train is given rights against a superior train to a designated point, is it competent for the train dispatcher to issue subsequently an order making a definite meeting point between the trains designated at an intermediate station, unless and until the previous order giving rights to the inferior train is superseded or annulled?

Answer. The Committee decided that it was competent and proper for the dispatcher to make a definite meeting point between the trains designated by a Form C order at an intermediate sta-

tion, and it would not be necessary to previously annul the order giving the rights before doing so.—April 14, 1892.

Question. Northbound, odd numbers are ruling trains; No. 2 gets an order at A giving it rights against No. 1 A to F. A subsequent order is given that No. 1 and No. 2 will meet at E, E being an intermediate station, what train takes the siding? Does the meeting order kill the order giving the rights?

Answer. The committee decided that the train having the rights under the special order would hold the main track.—March 8, 1894.

Question. I would be pleased to have a ruling as to the proper interpretation of the following train orders: At A extra 375 receives order No. 50 to meet No. 25 at B. Upon arrival of extra 375 at B, conductor was proffered order No. 51, giving him right over No. 25 to C. Conductor refused to accept order No. 51 until order No. 50 had been annulled. The dispatcher proceeded to annul order No. 50, completing order No. 51, then extra 375 proceeded towards C. Previous to annulment of order No. 50 to extra 375 at B, No. 25 had received and accepted both orders. Nos. 50 and 51, at B, and had departed. Having in their possession two orders, neither of which had been annulled to them, and with no intervening telegraph station between D and C, upon their arrival at C they proceeded towards B and met extra 375 on main line. The mistake of the dispatcher is unquestioned. What I desire to have your ruling on is as to the manner in which No. 25, with two orders, should have observed them. In other words, should No. 25 have attempted to pass C before the arrival of extra 375, and if so, in what manner?

Answer. In the opinion of the committee No.

25 should not have passed C before the arrival of extra 375.—Ruling Sept. 21, 1904.

Note—Since this ruling was made the note following Form C order has been changed. We think the above ruling was never warranted by the old note to Form C, as this note referred only to the one order the same as all other explanations to train order forms.

The note to Form C simply stated a principle where the one order was concerned, but was not intended to govern other orders that could be properly given. The code as revised, 1906, contains the words “unless directed by train order to do so,” following the 2d example to Form C, but we see no more necessity for that statement in Form C than we do in Form E, or the 3d example of Form G. In adding these words the committee have departed from the principle on which the other explanations to train order forms are based.—Ed.

CRITICISM.—The words “unless directed by train order to do so,” in the explanation to Form C are objectionable because they insinuate that the other forms are binding, as they do not make this exception. Take for example Form E, also example (3) of Form G, if the principle of these words under Form C were carried out, a subsequent meet order would in many cases be impossible of fulfillment until the Form E or G order was annulled, for the reason that the inferior train would have to get clear at the time stated in the order regardless of the fact that it held a meet with the train. Example (3) of Form G sets a definite time, Form E sets a definite time, and Form C a definite place, if, as is intimated, it is necessary under a Form C order to make an exception as stated above before another order can be used in connection with the form mentioned,

then it is equally necessary in case of the other forms.

We prefer to regard such forms as making the change in the schedule of the train as indicated by the explanation, leaving other meeting orders or right of track orders to be governed in turn by the explanations given them. To attempt to do more than this is to invite complications.

Form C and example (3) of Form G are used to reverse the rights of trains, and it should be plain to anyone that a meeting point may be fixed for trains whether they are superior by timetable or right, otherwise the code would be a failure. In our opinion the note to each form should simply state the fact as governed by the order explained, and not attempt to explain other forms in connection therewith. It would be as necessary to add to Rule 86 or 87, the words, "unless directed by train order to do so" as to add those words to the explanation of Form C.

Form E.

619. Q. If on No. 2 you hold an order reading: "No. 2 wait at A till 11:00 a. m. for No. 1," how would you be governed?

A. Would not pass A—before 11 a. m. unless No. 1 had arrived.

620. Q. As Conductor or Engineman of No. 1 how would you be governed, both being first-class trains?

A. Proceed to A and take siding, if could make A and clear main track by 11 a. m. If unable to make A and clear as required, would arrange to clear the main line at some intermediate station by the time required.

621. Q. How would a train of inferior right be governed if it received an order reading: "No. 1 run 20 min. late A to F?"

A. Would consider the schedule of No. 1 as

20 minutes later than shown on time-table between A and F.

622. Q. If on an inferior opposing train and received an order reading: "No. 1 run 2 hours late A to B and 1 hour late B to C," how much time could you use to make B?

A. One hour more than can be used when holding no orders.

622a. Q. If on an inferior train and received an order reading, Nos. 1 and 3 wait at N until 10 a. m.; P until 10:30 a. m.; R until 10:55 a. m., how would you be governed?

A. Would consider the time stated in the order as though it was the schedule time for Nos. 1 and 3.

EXPLANATION.—Under a Form E order trains using the time must clear such time the same as before required to clear the regular schedule time.

Trains can only use the time under Form E, examples 1 and 2 between the points named in the order, and never from a point beyond a point named, to make one of the points named in the order. Example, "No. 1 run 20 min. late A to B," a train could not use this 20 min. to make B from C.

All of the examples under Form E can be used in connection with an extra train created by example (3) of Form G. That is, if a train has been run extra on a schedule, such extra can be given an order to run 20 min. late, and other trains receiving the order can use the time the same as they use the time of a regular train.

A Form E order cannot be used to advance a train of the same class beyond the schedule passing point.

Example (4) is used when it is desired that one or more trains wait at several stations. This order is specially valuable when superior trains

are running close together, and besides is a good order for inferior trains as they do not have to add time to the schedule, in order to know how much time they can use.

RULING.—Question. No. 1 is instructed to run 10 min. late New York to Rochester; they pass Syracuse 10 min. late, which is the last station they are timed at east of Rochester; the train has but one time at Rochester, which is the leaving time, and, consequently, there is no time for them to arrive 10 min. late by. Their running time from Syracuse is slow enough to enable them to make up this 10 min. and be ready to leave Rochester on time, or within one or two minutes of it, and as their order expired as soon as they arrived at Rochester, what prevents them from leaving Syracuse 10 min. late and arriving at Rochester at their leaving time, they have no arriving time and its being generally understood that train is due to reach next station (if no arriving time is given) as soon as they can get there after leaving the last station as ordered or required by schedule.

Answer. No. 1 with an order to run 10 min. late New York to Rochester, should leave all intermediate stations 10 min. late, and arrive at Rochester (as no arriving time is shown there) as much ahead of its leaving time as would be permitted to do when running without an order; that is to say, the only difference this order makes is that the figures on the time-table are changed 10 min. later between the points specified in the order, and, as there is only one time given at Rochester, which is the leaving time, the order practically expired when the train left Syracuse.—Oct. 13, 1891.

Question. Under example 1, Form E, special East leaves Omaha with an order reading that No. 1 will run 30 min. late New York to Chicago.

Will this give the special until 3:25 to reach Chicago, or must they reach there at 2:55? If they must reach there by 2:55 of course they are not aided any against No. 1 by the order, as they have a right to go there at 2:55, 3 o'clock being the leaving time of No. 1. It is argued that No. 1's order has expired on her arrival at Chicago 30 min. late, at 3 o'clock, and has nothing to do with her leaving at 3 K or 3:01 provided her work is done, or she has none to do, and of course, in this event the special would not be helped any by the order. A great many conductors have said they would run against No. 1 until 3:25 to make Chicago.

Answer. Inasmuch as the order delivered to the special at Omaha did not control the movement of No. 1 west of Chicago, the order could not have been used by the special until after its arrival at Chicago. It was therefore an **improper** order to issue to move the special from Omaha to Chicago. If it was the purpose to move the special to Chicago against No. 1 the order prescribed in No. 2 (now No. 3), Form E, should have been used. In the opinion of the committee the issuing of this order as stated, gave rise to the difficulty which the gentleman mentions.—Oct. 13, 1891.

Question. The question has been raised whether, under "Form E, example 2," of the rule governing forms of train orders, a train can properly be held at more than one point in one order for the same opposing train.

For instance: No. 1 will wait at A until 2:40 p. m. for No. 2, and will wait at B until 3:10 p. m. for No. 2.

Form E does not specifically authorize such an order.

Answer. The reply of the committee is that under the Revised Code, Form E, example 3, a

train can properly be held at more than one point in one order for the same opposing train.—Ruling September 24, 1900.

Question. No. 1 due at A at 1 p. m., C 1:15 p. m., D 1:30 p. m. No. 2 is given an order to run 30 min. late A to D. Can No. 2 arrive at C or D ahead of this time?

Answer. The train receiving this order will run with respect to this later time, as before required to run with respect to the regular schedule.—Ruling March 19, 1902.

Question. No. 38 will run 1 hour and 40 minutes late London to York, 1 hour and 30 minutes late York to New Castle, 1 hour and 10 minutes late New Castle to Edinboro.

What is the last minute an inferior train running ahead of No. 38 could clear at Cambridge, York, New Castle and Edinboro? What is the last minute an inferior train southbound, could arrive at New Castle, York and Cambridge? From London to Edinboro is north bound.

Our Rule 386 reads as follows: "When a train of inferior class meets a train of superior class the train of inferior class must take the siding and clear the time of the superior class five minutes. A train of inferior class must keep six minutes off the time of a train of superior class following it." Clause A of same rule reads, "A first class train must not arrive at a station, where only the leaving time is shown, more than one minute in advance of the schedule leaving time."

Answer. In reply to the inquiry, the committee held that the last time at which an inferior train running ahead of No. 38 could arrive at the points named would be shown as follows: The schedule of No. 38 is leave London 3:10, Cambridge 3:31; York 3:42, New Castle 4, arrive Edinboro 5:50. An inferior train running ahead of No. 38 would have to be clear at Cambridge at 5:05,

York at 5:16, New Castle 5:24 and Edinboro at 6:54. An inferior train in the opposite direction would have to be clear at Cambridge at 5:06, at York 5:07, and at New Castle at 5:05.—March 2, 1898.

CRITICISM.—In the explanation to examples (1) and (2) the statement is made that the schedule time of the train named between the stations mentioned, is as much later as stated in the order. This is a misleading statement when Rule 82 is considered with respect to a train becoming 12 hours late. For example, if No. 1 is due at B at 1 p. m. and has an order to run 9 hours late, under the provisions of this explanation the schedule time of No. 1 becomes 10 p. m. instead of 1 p. m. and a number of trainmen understand that this explanation actually extends the life of the train. Of course such an understanding is wrong, as a run late order must not be permitted to extend the life of any schedule beyond the twelve hour limit as computed by the printed schedule of such train. The explanation to Form E should be changed so as to say exactly what it means.

Form F.

623. Q. If an order is issued reading: "Engine 18 instead of engine 85, display signals and run as second No. 1 R to Z," what will be the procedure?

A. Engine 85 will drop out at R and 18 will run as directed. All orders must be exchanged.

624. Q. If engine 85 is running as the last section, how will the order read?

A. The words "Display signals and" will be omitted.

625. Q. When it is desired to take down signals what kind of an order will be issued?

A. Second No. 1 take down signals at B.

626. Q. If desired to pass one section by another, what form will be used?

A. Engines 99 and 25 reverse positions as second and third No. 1 H to Z. When this is done all orders must be exchanged.

627. Q. To add an intermediate section what orders will be issued?

A. Engine 85 display signals and run as second No. 1 M to Z, following sections change numbers accordingly.

628. Q. Under the following order has engine 85 authority to proceed, and if so as what? No. 1 display signals A to M for Eng. 85."

A. Yes. It will proceed as 2d No. 1, without signals.

629. Q. Under the following order how will engine 85 run: "Engs. 80, 85 and 90 run as 1st, 2d and 3d No. 1 A to Z?"

A. As 2d No. 1 with signals.

630. Q. To annul a section for which signals have been displayed over a division or any part of a division when no train is to follow the signals what form must be used?

A. Form K.

631. Q. If 2d No. 1 received an order at H reading: "Eng. 85 is withdrawn at H following section change numbers accordingly," how would it be governed?

A. Would get clear on siding and take down signals, as would have no rights.

632. Q. How would Eng. 90 run from H?

A. As 2d No. 1 without signals.

632a. Q. Does an order reading: "Eng. 20 display signals and run as 1st No. 1 A to Z," give any authority for a second section to run if they receive a copy of the order?

A. No. It is a single order example and is only authority for Eng. 20 to run as 1st No. 1 and display signals.

632b. Q. Under the conditions stated in the above question how should the order read to authorize a 2d section of No. 1?

A. An order should be given reading: "Eng. 25 run as 2d No. 1 A to Z."

EXPLANATION.—This form covers nearly every situation which can arise. It is used whenever it becomes necessary to run more than one train on a schedule, and is therefore of great importance. When a section for which signals have been displayed is to be annulled a Form K order must be used. When sections drop out as indicated by example (7) the enginemen and also conductors, if they change, must exchange all orders which they hold affecting that section. When sections reverse position under example (9) all orders must be exchanged by the sections concerned, so that no mistakes can occur. It will be noticed that examples (5), (6), (8), and (9) are so worded that they supersede a former order without the use of the words "instead of." The exact wording of all the examples in Form F should be closely followed so that the action to be taken will be fully outlined.

The character of a train for which signals are displayed may be stated if desired. Each section affected by a Form F order must have copies of the order.

RULING.—Question. Please refer to Form F, Standard Code, which reads as follows: Engines 70, 85, and 90 will run as 1st, 2nd and 3d No. 1, London to Dover.

In the event that it is desired to cut out the second section of No. 1 at Chatham, would it be necessary under the rule to give notice of such change to engine 70, representing first section of that schedule.

The above proposition has brought out con-

siderable discussion among our local people here, and I am desirous of having the Committee on Train Rules pass upon the question.

Answer. When this form of the order is used the first section should have a copy of the order annulling the second section.—Ruling Sept. 24, 1900.

Question. After a section of a train has been run over one portion of a road, and the annulment of the section issued, would it be competent to run the same section of the same train over a different portion of the road? That is, if three sections of No. 23 are started out from A and at C the order is issued, 2d No. 23 is annulled from C could there be a 3d No. 23 run from D to E? An intermediate section can be annulled and following section take that section's number from where the change is made, but in that case the conductor or engine number is mentioned as being annulled as 3d section.

Answer. Assuming the points named are all in the same dispatching division, the answer is No. Under the last paragraph of Form K, which reads, "When a train has been annulled it must not be again restored under its original number by special order."

Question. I am in receipt of the report of the Committee on Train Rules of the American Railway Association, New York, October 6th. I find an inquiry submitted in regard to annulling a section of a train to which the Committee replied: "No." While I admit that the inquiry was probably not put as it should have been, I do think that the Committee should have made itself plain, as that ruling is going to confuse almost all roads which are endeavoring to follow out the ruling of the Train Rule Committee. I would like to ask, for instance, if engine 214 was 3rd No. 23 and from some cause was disabled at B, what is to hinder

the dispatcher from annulling engine 214 as 3rd No. 23 at B and when he gets a relief engine, 216, to that point, giving it an order to run as 3d No. 23 from B to the point to which signals are carried by the leading section. Of course the Committee had in mind that if 3rd No. 23 was annulled from B, the train could not be represented, but as long as the signals were carried beyond that point and intermediate train not notified, I would like to ask as information why 3rd No. 23 could not be represented by another engine?

Answer. There is nothing to hinder the dispatcher from annulling 3rd No. 23, but the change of an engine does not necessarily involve such annulment..

Question. Example 5, Form F, appears to authorize the adding of an intermediate section to a train. This, according to my understanding, authorizes two trains on the same division at the same time, with the same name designating them; that is, there might be at the same time two sections of the same train of the same name. For instance, A, B, C, D, E, F and G are stations going north on a certain division. Train No. 1 has orders to carry signals A to Z for Engine 555. After passing D, the second section not having arrived, it is desired to start another train as second section of No. 1, Engine 555 not having arrived. An order is, therefore, sent to D, stating that Engine 999 will run as second No. 1, D to G, the following sections changing numbers accordingly. A south bound extra receives orders to meet first No. 1 at F, second No. 1 at E. On arriving at E, they find that second No. 1 is carrying signals for a third section, and have to get an order to meet third No. 1 at D. On arriving at D third No. 1, which would have Engine 555 when it arrives, is not there. It is, however, desired to send the extra along and they are given an order

to meet second No. 1 at C. They have, therefore, on the same division received orders to meet second No. 1 at two different points, second No. 1 being two separate and distinct trains. Is it authorized, and is it proper interpretation of the Standard Code? If it is, would we not in the above case, if No. 1 were delayed at B, be justified in starting another No. 1 from D, carrying signals for the train that was delayed? If so, a south bound extra in this case might receive an order to meet No. 1 at E; and, again on arriving at D, if the train that started from A had not arrived, they would get another order to meet No. 1 at C. It does not seem to me, therefore, that the Standard Code can authorize such movements as this.

The third paragraph of Rule 4 states that not more than one schedule of the same number and day shall be in effect on any division or subdivision. This refers to schedules and not to trains, so that, as far as the rules go, I can see no objections to the examples cited above.

Answer. Intermediate sections are authorized by the rules, and any number of the sections may be run. It is not permissible to run more than one schedule of the same number on the same day. It is the duty of the train dispatcher, who introduces intermediate sections, to safeguard the arrangement by proper notification to those concerned.—April 18, 1911.

CRITICISM.—Form F should contain an example providing for signals being carried to an intermediate station. This should be a second example under example (1). This should be followed by a second example under (2) reading: "Engine 25 run as 2d No. 1 A to G and as No. 1 from G." We suggest that these examples could be used under the present form to cover such cases without violating the principle of the form. The explanation to example (7) should read:

"Under (7) Engine 85 will drop out at H and Engine 18 will run as directed, its engineman (and conductor, if he also change,) first obtaining the train orders relating to 2d No. 1, held by the engineman (and conductor) of Engine 85." The second paragraph of the explanation under (7) should stand as it is.

The explanation under example (9) should be changed as follows: "Under (9) Engine 99 will run ahead of Engine 25 H to Z, the conductors and enginemen of both sections exchanging train orders and arranging signals accordingly. Following sections, if any, need not be addressed."

Form G.

633. Q. How would extra 90 proceed under the following order: "Engine 90 run extra, A to C"?

A. Would proceed to C, keeping clear of all regular trains.

634. Q. Would you be required to protect against opposing extras upon this order?

A. No.

635. Q. What rights does this give you to main track at C?

A. None. Would take the siding at C.

636. Q. Are extra trains required to clear all regular trains, and if so, how much?

A. Yes. Five minutes.

637. Q. If Engine 75 held an order to run extra A to D and return, would it be necessary for Extra 75 to go to D before starting on the return trip?

A. Yes. Otherwise the order is not fulfilled. If No. 1 held an order to run 20 minutes late A to C and 10 minutes late C to F, we would not expect No. 1 to begin to carry out the last part of the

order before fulfilling the first part. It is an order that should not be used unless necessary.

638. Q. If Engine 77 held an order to run extra, as per example 3, would this extra lose right when it became 12 hours late?

A. No.

639. Q. If Engine 79 held an order No. 1 to run extra A to D and meet No. 26 at D and upon arrival at D it should be given order No. 2 to run extra D to E and meet No. 26 at E, would it be a proper order?

A. Yes. As upon arrival of Extra 79 at D it ceases to exist as an extra, and all orders held by it expire.

Note.—Order No. 2 created a new extra. But should a case occur as above with the exception that the second order did not mention Extra 26, the attention of the dispatcher should be called to Extra 26, for the reason that the order to meet it at D has expired.

640. Q. If Engine 79 arrived at D under order No. 1 and received order No. 3 to run extra to E instead of D, and also received order No. 4 to meet No. 26 at E, could it go to E for No. 26?

A. No. Order No. 4 would be improper as order No. 3 does not create a new extra, but simply extends the limits of the old extra, and in consequence Extra 79 cannot pass the meeting point D until the original meet with No. 26 at D is superseded or annulled.

EXPLANATION.—When a passenger train is run extra on a schedule and given right over all trains, the order does not give it any rights over yard engines, and the extra must approach and pass through yards the same as any other extra train. Switch engines are not trains within the meaning of the rule.

When originating an extra the dispatcher should in each case fix a meeting point for it with

all opposing extras or give it right of track. Several cases have come up where dispatchers have issued orders to opposing extras that one would wait at a certain station until a certain time for another extra. This is not a proper order to give for the protection of extra trains. Such order does not restrict the rights of the opposing extra, and is not authority for it to clear the main track after the time expires.

When an extra reaches the last station named in its running orders, it must pull in at the switch where inferior trains moving in that direction side track for superior trains. An extra train has no right to occupy the main track where it originates or where it terminates.

Extra trains are not required to protect against opposing extras unless directed by train order to do so.

A train run extra on a schedule does not lose right when 12 hours late on such schedule.

RULING.—Question. Will you kindly say if special trains should carry a white signal? There is a wide difference of opinion on the subject and I respectfully refer the matter to you.

Answer. A train running under example 1, Form G, would carry the white classification signals, because it is a train not represented on the time-table, and is therefore an extra train. A train running under example 2 (This is the form used for running a train on a schedule and making it a supplement to the time-table. It is no longer a Standard Code example). Form G, would not carry the white classification signals, because the order expressly states that its schedule is a supplement to the current time-table, and therefore makes it a regular train.—Ruling Sept. 24, 1900.

Question. I beg to submit to the Committee on Train Rules the following inquiry in regard to

Form G, Extra Trains, under example (1) ; Engine 99 will run extra, Berber to Gaza.

Supposing Gaza to be a way station, to which point within the somewhat indefinite limits of Gaza does the order give the extra the right to run?

A definite ruling on this point seems important, especially when we consider that it is perfectly competent for the train dispatcher to give an extra running in the opposite direction a similar order from some other point to Gaza, and that, so far as the rules provide, neither extra would have any information as to the destination or existence of the other.

Answer. Persuming that Gaza is an intermediate station on a division, the order gives the extra the right to run to the entrance switch of the siding and clear the main track.—Ruling Sept. 24, 1900.

Question. Engine 25 run extra A to B. Has this extra right to proceed to telegraph office, which is located at extreme end of passing siding, providing there is no superior train due to compel them to take siding, or do standard rules require them to head in at first switch?

Answer. The answer to this question is to be found in Rules 89 and 90 of the Standard Code of Train Rules. The extra train expires at B, and must head into the siding and clear the main track at B. If for any reason it is necessary for the extra to occupy main track for purposes of pulling down to extreme length of siding, or for any other reason, it can do so only under protection.

CRITICISM.—Form G should contain an example for starting an extra train when an opposing extra is to be met at that station. For this purpose suggest that the example read, "After Extra 14 arrives at A, Engine 15 run extra A to G."

Form H.

641. Q. If on Engine 292 you received an order reading: "Engine 292 works 7 a. m. to 6 p. m. between D and E," how would you be governed?

A. Would clear the time of regular trains and would protect against extras in both directions.

642. Q. If the order contained the clause "Not protecting against extras," how would you be governed?

A. Would clear the time of regular trains, but would not protect against extras.

643. Q. If Extra 292 received an order reading: "Work Extra 292 clears (or protects against) Extra 76 east between D and E after 2:10 p. m.," how would it be governed?

A. It must clear at 2:10 p. m. or protect as the order requires.

644. Q. How will Extra 76 east proceed?

A. It must not enter the limits before 2:10 p. m. and will then run expecting to find the work extra clear of the main track or protecting as the order may require.

645. Q.—If work extra received an order reading: "Work Extra 292 protects against No. 55 between D and E," how would it be governed?

A. It would work on the time of No. 55, protecting as per Rule 99.

645a. Q. If work extra receives an order reading: "Work Extra 292 has right over all trains between D and E 7 p. m. to 12 night," how will it be governed?

A. It will work as directed and have right over all trains.

645b. Q. How will other trains be governed?

A. They must not enter the limits until 12 night unless the order is annulled or superseded.

EXPLANATION.—Work trains or other trains working where they cannot see the main line, should leave a man on the main line to ascertain what trains have or have not passed and of any trains that may have passed broken in two, unless work trains leave the main line at a register station or where other arrangements are made.

Form H is nearly automatic in self-protection, being arranged so that in absence of instructions to protect, the work extra must protect; any other extra receiving the order would expect to find the work extra protecting. If the work extra is directed not to protect, such information will be indicated in the instructions; so that another extra receiving the order would be required to protect through the limits as per Rule 99. The existence of a work train is always limited by time, and when such time is up the existence of the work extra, as such, ceases, and any orders which it holds must be considered void.

RULING (double track)—The question has been asked whether a work extra working on one or both tracks on double track without being required to protect against extras has the right to move against the current of traffic or only to move with the current of traffic?

Answer. This order gives the extra ample authority to move against the current of traffic within the limits and time named, properly clearing the time of regular trains.—Oct. 17, 1910.

NOTE.—The objection to this ruling rests in the fact that Rule D-97, a rule which was framed for the government of work extras on double track, states definitely that a work extra must move with the current of traffic unless otherwise directed.

Question. A train order has been sent reading: "Engine 292 work 7 a. m. to 2 p. m. between D and E. Work Extra 292 south will meet No. 328

at E." At 2 p. m. Work Extra 292 has not arrived at E. Does the meet order held by No. 328 hold good after 2 p. m., or can No. 328 proceed on its schedule?

The Committee made reply that, "If an order should be sent in the form suggested in the inquiry, it would be the duty of No. 328 to remain at E until Work Extra 292 arrived or until the order was annulled. Form A, fixing a meeting point for opposing trains, states definitely that trains receiving these orders will run with respect to each other to the designated points and there meet in the manner provided in the rules. If it is the intention of the dispatcher that No. 328 should move after 2 p. m., if the work extra had not arrived at that time, another form of order should be used."

Form J.

646. Q. How would No. 2 respect an order held by an operator reading: "Hold No. 2"?

A. It would respect the order the same as if addressed to it and would not proceed until an order was sent annulling the order, or an order given to the operator reading: "No. 2 may go."

647. Q. How will the operator handle these orders?

A. He will deliver them to the conductor and engineman of No. 2.

648. Q. What will Form J be used for?

A. To hold trains until orders can be given, or in cases of emergency only.

649. Q. After a train has been held by a Form J order can it proceed when it receives an order reading "_____ may go" in case the signal still remains at "stop"?

A. No. Not unless it receives a clearance card in addition to the "_____ may go" order, as this order simply clears the train on the "Hold"

order, but does not clear on the stop signal, hence a clearance card is necessary as per Rule 221, if the signal remains at stop.

EXPLANATION.—When an order is sent to an operator directing him to hold all trains and later a certain train is released with an order reading “_____ may go,” all other trains must be held. Unless the rules specially require, it is not necessary for the conductor to sign for the order, but the operator should deliver a copy for the engineman and conductor of all trains affected. This form cannot be used to hold trains at a station for the purpose of advancing other trains against or ahead of them. Such movements must always be made in the regular manner.

Form K.

650. Q. How would an order reading: “No. 1 of Feb. 29th is annulled A to Z,” affect the rights of No. 1?

A. It would have no rights or schedule between A and Z.

651. Q. When a train is annulled to any given point, are its rights affected beyond that point?

A. No.

652. Q. When a train has been annulled, may it be restored under its original number by special order?

A. No.

653. Q. If you held an order to meet No. 1 at C, and later got an order that No. 1 was annulled, how would you proceed?

A. Would consider the order, to meet No. 1, void as per Rule 220.

654. Q. How would an order reading: “2d No. 1 of Feb. 29th is annulled E to G,” affect 2nd No. 1’s rights?

A. It would have no right or schedule between E and G.

EXPLANATION.—When a schedule has been annulled it cannot be restored. An annulling order cannot be annulled or superseded.

Form K is used when, for some reason, a timetable schedule is not to be used on a certain day. Two examples of this form are shown. One for annulling a schedule, and the other for annulling a section. When a section or a schedule has been annulled the authority of such schedule or section becomes void between the points named, and cannot be restored. When a train holds orders concerning another train, and later receives an order that such other train is annulled, all orders or parts of orders relating to the train which is annulled become void. Inferior trains may proceed upon the time of such annulled train as though the train was not named on the time-table.

The date which is used in an annulling order refers to the date the train annulled is due to leave its initial station, on such division, or subdivision.

RULING.—Question. Is it necessary for a detoured train to have a train order before resuming its schedule on returning to its own line, for instance: A train scheduled from A to Z detours from E to N. May it resume its schedule at N without a train order instructing it to do so?

Answer. Assuming that Form K has been used to annul the train between E and N, there is nothing to prevent it resuming its schedule N to Z without a train order.

Form L.

655. Q. How must an order annulling another order read, and must it be numbered, transmitted and signed for as any other order?

A. Order No. — is annulled. Yes.

656. Q. May an order, once annulled or superseded, be restored under its original number?

A. No.

657. Q. Under the following orders, how will No. 1 be governed: Order No. 1, "No. 1 meet No. 2 at B." Order No. 2, "No. 1 meet No. 2 at C instead of B." Order No. 3, "Order No. 2 is annulled."

A. Order No. 2 superseded Order No. 1, making it of no effect and fixed a new meeting point at C. Order No. 3 annulled Order No. 2, which leaves No. 1 and No. 2 without any orders, and they must be governed by time-table in making the meeting point, because orders once superseded or annulled are of no effect even though the order which superseded or annulled them has been annulled.

EXPLANATION.—There is only one example shown under this form. It reads, "Order No. 10 is annulled." When such an order is received all provisions contained in Order No. 10 are cancelled. If the order which is to be annulled has not been delivered to the train the annulling order will be addressed to the operator, who will destroy all copies of the order, except his own, and will write on his file copy, "annulled by order number —." If the order which is to be annulled has been delivered to a train, the order annulling it will be addressed to such train. Trainmen and others receiving a Form L order should be careful that the number of the order which he destroys agrees with the number named in the Form L order.

RULING.—Referring to the following paragraph: "If an order which is to be annulled has not been delivered to a train, the annulling order will be addressed to the operator," the Committee was asked what was meant by "delivered"—whether it means the delivery to the trainmen after the order is made complete only, or whether

it includes the delivery of an order that has not been made complete to the engineman and conductor for signature, and the occasion for annulling the order does not arise until after such signatures have been received? If the meaning of the word "delivered" applies only to the case first stated, what official knowledge can the conductor and engineman, who have signed the order, have that the order has been annulled, and they would not be responsible for its fulfillment?

Answer. In the judgment of the Committee the delivery of an order can take place only after "complete" has been given as stated in Rules 210 and 211.—Dec. 10, 1896.

Form M.

658. Q. If you hold an order containing two or more movements, may part of the order be annulled, and how?

A. Yes. By an order reading: "That part of Order No. —, reading —, is annulled."

659. Q. Would this affect the other movements in the order?

A. No.

EXPLANATION.—Only one example is shown under this form, and this example properly belongs under Form L. The example reads, "that part of an order No. 10 reading No. 1 meet No. 2 at S is annulled." When part of an order is annulled the remaining portion of the order is still in force and must be obeyed. Only such portion of the order is annulled as is mentioned. When part of an order has been annulled, it must not be again restored under its original number, and, should the order which annulled part of an order be itself annulled, it does not restore that part of the order which the annulling order destroyed.

Form P.

660. Q. How may an order or part of an order be superseded?

A. By adding to the prescribed forms the words, "instead of —."

661. Q. May an order which has been superseded be reissued under its original number?

A. No.

EXPLANATION.—An order which has been superseded cannot be again restored under its original number. Only such part of an order is superseded as follows the words, "instead of."

Two or More Forms.

700. Q. (A-C) If No. 1 holds right of track order over No. 2 A to H and later gets an order to meet No. 2 at D, which train will take siding at D?

A. No. 2 for the reason that No. 1 is the superior train by (train order) right.

701. Q. (A-B) If No. 1 holds the following order how will it be governed: "No. 1, pass No. 3 at B and meet No. 2 at C"?

A. No. 1 will pass and run ahead of No. 3 from B and will meet No. 2 at C as directed.

702. Q. (A-E) If No. 1 holds an order that No. 2 runs one hour late and later gets a meet order with No. 2, are both orders in effect?

A. Yes.

703. Q. (A-E) If under the conditions named above No. 1 can make a station further on the time order for No. 2 than it can make on the meet order, can it pass the meeting point and go to the next station for No. 2?

A. No. Both orders are in effect, but the meeting point must be respected, as named in the order.

704. Q. (Misc.) What forms of orders can be combined?

A. Nearly all the forms can be combined. It is not good practice to combine annulling orders with any other form.

705. Q. (H-A) If No. 67 holds an order that Engine 234 works 5 p. m. to 7 p. m. between A and D and meets No. 67 at D, can No. 67 pass D at 7 p. m. if the work extra is not there?

A. No. It must obey the meet at D, although it is admitted that the work extra is dead and must not go to D on the order. (Rule 220 should be so changed as to provide for this.)

706. Q. (A-P) No. 1 runs A to Z and No. 2 Z to A. If No. 1 gets an order to meet No. 2 at F and later gets an order to meet 1st No. 2 at E instead of F, can No. 1 go to F for 2d No. 2?

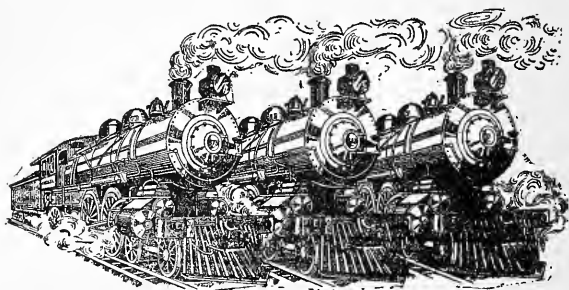
A. Yes, for the first order mentioned No. 2 by its schedule number alone and therefore all sections were included; the second order only superseded that part of the first order which referred to first No. 2.

707. Q. (A-P-L) If under the two orders named in the previous question No. 1 should receive an order at B annulling the second order, what rights would No. 1 have?

A. The first order made a meet at F for all sections of No. 2; the second order superseded it only so far as first No. 2 was concerned; the third order annulled the meet at E for No. 1 and 1st No. 2 and as the meet at F for them had been superseded it leaves No. 1 with no orders against first No. 2, but it has a meet at F with second No. 2 and all following sections of No. 2.

708. Q. (Misc.) When an annulling order is annulled or superseded or when a superseding order is annulled or superseded, does it restore the order which these orders annulled or superseded?

A. No. When an order or part of an order has been annulled or superseded, it is of no effect and must not be restored under its original number.



MISCELLANEOUS A. R. A. RULINGS

REVERSE MOVEMENTS.—In running a train over opposite track is it necessary or customary to state the cause as “north bound track obstructed,” etc., or simply give 19 order to trains to use that track, and when they receive orders to use the opposite track do they understand that they are governed by single track rules? That is, they are superior to trains which, under the timetable rules, they would be superior to on single-track and inferior to trains which they would be inferior to under single track rules, while running on that track?

Answer. The committee does not consider it necessary to state the cause.—Ruling Sept. 11, 1901.

SIZE OF BLANK.—Is there any objection to using form of train order book size $7\frac{1}{2} \times 10\frac{3}{4}$ in. beyond the perforated line at top, and $7\frac{1}{2} \times 11\frac{1}{8}$ in. over all?

Answer. The Committee believes that the form recommend in the Standard Code is best suited for the use of railroads generally. Larger blanks are permissible, but in the opinion of the Committee are undesirable.

CLEARANCE CARD.—It is suggested that the Standard Code clearance card be changed so as to show the numbers of train orders delivered to the trains receiving the card. So that if any question should arise as to whether or not an order, possibly a 19 order which was not signed for, was

delivered, the clearance can be produced as an actual record of the delivery or non-delivery.

Answer. The clearance card as printed in the Standard Code gives all the information necessary. The requirements of further information might lead to error on the part of the operator.

PILOT.—The responsibilities of a pilot are the same as the responsibility of the engineman or conductor, or both, whom he pilots.

DIRECTION.—The American Railway Association recommends that odd numbers shall be given west and south bound trains and even numbers to east and north bound trains.

COLOR.—Recommend that no cross-arm or telegraph poles be painted red or green.

SWITCH LIGHTS.—A letter was submitted in regard to the proper color to be used for switch lights. It is the unanimous opinion of the Committee that red and white are the proper colors, but it has purposely omitted any mention of the same in the rules, believing that the significance of the colors determine same, there being no question about the use of red for open switches. If white is used, it means that there is no restriction as to speed unless otherwise ordered. If green is used, it means that caution is to be used and it is a signal to go slow.

OPERATOR'S TRANSFER.—A form of operator's record and transfer of orders was submitted to the Committee, and while it thought the form a good one, it was the opinion that such matters must be left to the judgment of each line, to be determined according to the circumstances governing operation.—April 7, 1891.

DISTANT SEMAPHORE SIGNALS. — A question was submitted to the Committee in refer-

ence to the color and shape of distant semaphore signals for head on switches. The opinion of the Committee was that under no circumstances should red be used as a cautionary signal; the proper color is green. The determination of the shape of the signal should be left to each road. Taking into consideration the fact that semaphores are now being used for block purposes, it may be desirable to use different shapes for different purposes. The question as to what the distant signal is to denote, determine the color. If it is not intended to stop the train until the signal is changed, it should be red; if intended to allow the train to pass under control, the signal should be green.—April 7, 1891.

RED AND WHITE LIGHTS ON REAR OF TRAIN.—After examining the results of experiments made on the Wabash and the Pennsylvania Railroads the Committee unanimously concluded that red lights alone are better than a combination of red and white lights for marking the rear end of a train. Both sets of experiments conducted independently of each other, brought out the fact that the white light somewhat obscured the red; that is to say, the red disappeared from view sooner when shown in connection with the white than when shown alone, the red being absorbed by the white.

It was also suggested to the Committee that the use of white lights in connection with red lights for rear-end signals would interfere with the semaphore bracket signals, on which the display would be in the same relative position as when a white light or lights were used in connection with one or more red lights on the rear end of a train. Oct. 12, 1887.

A. R. RULING. Q. Three orders are given.
Order No. 1: "Extra 456 east wait at B until

7:15 p. m. and at C until 7:45 p. m. for work extra 461."

Order No. 2: "Extra 456 east meet work extra 461 at C."

Order No. 3: "Order No. 2 is annulled."

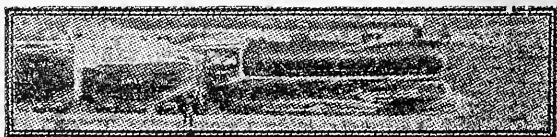
Under these orders, when can extra 456 east pass B and C after receiving order No. 2? Does order No. 2 supersede order No. 1? After receipt of order No. 3 is order No. 1 in effect?

A. Order No. 1 and No. 2 conflict with each other, and are, therefore, improper. Orders once in effect continue so until fulfilled, superseded or annulled.

Form P is the only form given for superseding an order, and Forms L and M are the only forms given for annulling an order. None of these forms having been used, order No. 1 is in effect until fulfilled.

Therefore, extra 456 east cannot pass B until 7:15 p. m., unless the work extra is clear before that time and (until order No. 2 is annulled) must wait at C until extra 461 is clear. After order No. 2 has been annulled, extra 456 can pass C at 7:45 p. m., unless the work extra is clear before that time. Ruling 1913.

(Editor's Note): The authority to state that orders No. 1 and No. 2 conflict is not clearly defined in the Rules, nor does the present practice under Standard Rules conform to such practice.



POINTS ANSWERED BY THE EDITOR

Question. Please give your understanding of the following order: "Work Extra 810 has right over all trains between A and H 8 a. m. until 12:30 p. m."

No. 85 arrives at H and finds Work Extra 810 in to clear, can No. 85 proceed?

Answer. A strict interpretation of the order quoted forbids any train entering the limits until 12:30 p. m., unless it holds orders to meet or run ahead of the work extra. The fact that Work Extra 810 is clear when No. 85 arrives there, is not sufficient to permit No. 85 to proceed ahead of the work extra, as the order gives the work extra exclusive right to the territory. Rule 86 requires that an inferior train clear the time of a superior train in the same direction not less than five minutes, and as the work extra has no schedule time, but is under the rules a superior train, No. 85 must keep out of its limits entirely. Rule 86 refers to an inferior train, whether inferior by timetable or by right. Rule 71 makes it plain that a train may be superior to another by right, class or by direction, right being conferred by train order and class and direction by time-table.

Question: "No. 2 take siding and wait at Summit until 3:15 p. m. for No. 85." What will No. 2 do if it arrives at Summit at 3:16 p. m.?

Answer. Under the order No. 2 should take siding at Summit regardless of the time at which it arrives at that point.

The order is improper because the authorized

form for making the movement has been changed and not preserved in its original wording. That is the take siding provision has been inserted in the middle of the third example of Form E, with the result that a doubt has been created because the dispatcher has departed from the authorized form of train order. It should be remembered that whenever anything is to be added to an authorized form of train order it should follow the regular form in logical sequence and should never be inserted in the middle of the form. The order used is at once recognized as a wait order, and as such the time is essential, but there is no such thing as a limit to taking sidetrack—that is to say, a train will take siding or it will not, but there is no arrangement for a limit of time to the performance. Good judgment suggests that such an order should not be used because of the doubt which it is liable to create on account of a limited provision and a positive provision being combined. However, the order having been used, it remains for No. 2 to carry out its provisions by taking siding at Summit even though it holds a doubt as to whether or not the order requires it; this because Rule 106 requires in all cases of doubt that the safe course must be taken and no risks run, and it is evident that the only safe course for No. 2 is to take siding. It is equally evident, from a technical standpoint, that the order requires No. 2 to take siding regardless of the time.

Question. It has never seemed to me that the Standard Code makes it plain enough as to just what portions of the main track a work train is entitled to use under the regular form of work train order. For instance, Engine 79 holds an order to work between "A" and "B." As I understand it, in putting the question to a man who is passing an examination for conductor or engineer, if, holding an order reading, "Engine 79

work extra 7:00 a. m. to 6:00 p. m. between A and B," what part of the main track are you entitled to use without protecting by flag, provided, of course, all overdue trains have gone. Suppose the applicant answers, "Between the depots at said stations," or between the farthest switches, that is, between the north switch at A and the south switch at B, A being a station north of B. The examiner then explains to him that this order gives him the right to the main track only between the south switch at A and the north switch at B. The applicant then remarks that he has found nothing in the general rules explaining exactly what his limits on the main track are. Will you please advise me what rule or rules I can point out to him to back up my explanation that he has right to use the main track only between the south switch at A and the north switch at B?

It does not seem to me that Rule 5 fully covers this, for the reason that all overdue scheduled trains may have gone and the work train, which is working between A and B, has a clear track between these points, so far as regular trains are concerned, and, on extra train is started over the division with orders to run from a point north of A south to a point south of B, and to protect against Work Extra 79 between A and B. As I understand the code, this extra south can pull down to the south switch at A, remaining just far enough north of this switch to clear. Suppose the work extra, after all overdue scheduled trains have gone figures that they have a right to go up the main track to the depot at A, or to the north switch at A, and collide with this extra south. If this should occur, which crew, according to the rules, would be at fault?

Answer. In the case of a regular train, Rule 5 makes the time apply at the switch where an inferior train enters the siding. This statement

fixes the application for the location of the rule with respect to a station, and, at the same time, it marks the limit of any station so far as one train is concerned with the movement of any opposing train.

The authority for explaining to trainmen that an order to work extra between A and B does not entitle them to the use of the main track at the station at A or B, is found in the language of the order itself, coupled with the general understanding, as outlined in Rule 5. Rule 5 indicates that the station at B is at the north switch for an inferior south bound train and at the south switch for an inferior north bound train. By considering this for a moment, we come to understand that officially the station at B, as shown on the timetable, extends from the north switch to the south switch, depending upon the direction in which a train is moving, and also upon its superiority or inferiority. Under a Form G order, directing a train to run extra to B, such extra train must consider that their order to use the main track expires when they reach the first entrance switch at B; following this line of thought as connected with the work extra, you will note that the order to work reads, "Between A and B," and that it is required that this work extra use the first entrance switch at both stations. This limits them to the use of the main track between the south switch at A and the north switch at B. The word "between" which is used in the order is not capable of being construed as applying at the station of A or B, but only between these stations.

When it is desired that a work train use the main track at B, the working limits should be given between A and C. To sum up, a station officially extends from one extreme switch to the other. Work orders read between certain stations,

which limits the work train to territory between, and not at, either station named in the order.

In case an extra should be moving south over the work train limits, as you suggest, and this extra should collide with the work extra between the switches at A, it would certainly be the fault of the work extra crew for using the main track at A, when their order definitely specifies that their limits are between A and B.

Question. This district is from A to P. Register stations at A, D, G and P. A second class train departing from A receives an order that the second section of a first class train will run two hours late from G to A. The second class train makes C for the second section which passes without signals. At station G the second class train receives an order that the second section of the same schedule which was met at C will run nine hours late from P to G. The second section of this same schedule is met at O. Can the same section be met more than once on the same date on the same district? Did the meeting of the second section at C without signals complete the schedule upon the district? Can another second section be cut in upon any territory not covered by the first second section?

Answer. The movement as outlined above is entirely proper and safe when handled in accordance with the rules. In this case the register at G would give the information that second section of the train referred to had not arrived there and it would also give the information that the first section from P displayed signals to G for a following section. But outside of this it is the duty of the dispatcher who introduces more than one second section or other section of a train to safeguard the movement by proper notice to trains. The rules do not direct any special action in a case of this kind but because of the complications

which may arise the dispatcher should take extra precaution. In the case under discussion the order at G giving nine hours of the time of the second second section between P and G would safeguard the movement, in addition to the information contained on the register which might be easily overlooked because of the schedule having been fulfilled on one portion of the district.

It is possible to meet three or four 2nd No. 15s on one district and if properly handled all can be given perfect protection. The meeting of a second section at C without signals does not complete the schedule at any point except at C, so far as the inferior train at C can know. At each register station the register must be examined for other possible sections.



QUESTION DEPARTMENT.

The Editor of Standard Train Rule Examination receives many requests for his personal understanding of certain cases and as these questions require much time and attention the Editor requests that each letter, where personal answer is desired, should be accompanied by 25 cents in stamps or coin. This amount is not to be considered as payment for the service, but rather to cover expense of stenographer, stationery, etc.

CORRESPONDENCE COURSE

Complete Course on Train Rules and Orders under personal direction of Mr. Collingwood. Write for particulars.

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